File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Notice of Appeal Filed	aia0031-second.pdf	236284 41bfc2306b9c363dddb205fd32eaf716356c7d18	no	2
Warnings:					
Information:					
2	Appeal Brief Filed	Second-Appeal-Brief-9-18.pdf	558206 f8354dd58ec722a0c5bb2c71d255460c73b61ede	no	83
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	29863 068f34a40d9889ed97190b79e655190f6f7ee744	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	824353		

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.

PTO/AIA/31 (03-14)
Approved for use through 07/31/2016. OMB 0651-0031
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NOTICE OF APPEAL FROM THE EXAMINER TO THE PATENT TRIAL AND APPEAL BOARD

Docket Number (Optional): BINDER-014-US3

I hereby certify that this correspondence is being facsimile transmitted to the USPTO, EFS-Web transmitted to the USPTO, or deposited with the United States Postal Service with sufficient postage in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, on Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on _____.

Signature _____

Typed or printed name _____

In re Application of: Yehuda BINDER

Application Number	Filed
15/657,163	July 23, 2017

For: SYSTEM AND METHOD FOR SERVER BASED CONTROL

Art Unit	Examiner
2456	KHAN, HASSAN ABDUR-RAHMAN

Applicant hereby **appeals** to the Patent Trial and Appeal Board from the last decision of the examiner.

The fee for this Notice of Appeal is (37 CFR 41.20(b)(1)) $ _____

☑ Applicant asserts small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by 50%, and the resulting fee is: $ 400.00

☐ Applicant certifies micro entity status. See 37 CFR 1.29. Therefore, the fee shown above is reduced by 75%, and the resulting fee is: $ _____
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☑ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 506726.

☐ Payment made via EFS-Web.

☐ A petition for an extension of time under 37 CFR 1.136(a) (PTO/AIA/22 or equivalent) is enclosed.
For extensions of time in reexamination proceedings, see 37 CFR 1.550.

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

☐ applicant

☑ attorney or agent of record
Registration number 73612

☐ attorney or agent acting under 37 CFR 1.34
Registration number _____

Signature /Yehuda Binder/

Typed or printed name Yehuda Binder

Telephone Number -972-544444577

Date 2018-10-03

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☐ * Total of _____ forms are submitted.

This collection of information is required by 37 CFR 41.20(b)(1) and 41.31. 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, 1.14 and 41.6. 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.**

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The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/657,163	07/23/2017	Yehuda BINDER	BINDER-014-US3	1088

131926 7590 10/02/2018

May Patents Ltd. c/o Dorit Shem-Tov
P.O.B 7230
Ramat-Gan, 5217102
ISRAEL

EXAMINER	
KHAN, HASSAN ABDUR-RAHMAN	

ART UNIT	PAPER NUMBER
2456	

MAIL DATE	DELIVERY MODE
10/02/2018	PAPER

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

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 15/657,163	**Applicant(s)** BINDER et al.	
	Examiner HASSAN A KHAN	**Art Unit** 2456	**AIA Status** No

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

THE REPLY FILED 25 September 2018 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☑ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires ____ months from the mailing date of the final rejection.
   b) ☑ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
   c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection.The current period for reply expires ____ months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.
   Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANTS FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   b) ☐ They raise the issue of new matter (see NOTE below);
   c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: _____ (See 37CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicants reply has overcome the following rejection(s): _____
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☑ For purposes of appeal, the proposed amendment(s):(a)☐ will not be entered, or (b)☑ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____
9. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
10. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
11. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

12. ☑ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
13. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
14. ☑ Other: A.NE.

STATUS OF CLAIMS

15. The status of the claim(s) is (or will be) as follows:
    Claim(s) allowed:_____.
    Claim(s) objected to:5.
    Claim(s) rejected:1-30.
    Claim(s) withdrawn from consideration:_____.

/HASSAN A KHAN/ Examiner, Art Unit 2456	/PHILIP J CHEA/ Supervisory Patent Examiner, Art Unit 2456

Continuation of REQUEST FOR RECONSIDERATION/OTHER 12. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: In response to the objections raised by the office for Claim 12, the applicant spelled the acronyms, and made the correction. No changes/arguments were made to address the Objection on Claim 5, and the 101, 103 and the 112 rejections.

OK TO ENTER: /H.A.K/

10/01/2018

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: BINDER-014-US3

In re Application of:	)	Confirmation No. 1088
	)	
Yehuda BINDER	)	Art Unit: 2456
	)	
Appln. No.: 15/657,163	)	Examiner: Khan, Hassan A.
	)	
Filed: July 23, 2017	)	Washington, D.C.
	)	
For: System and method for Server-based control	)	September 25, 2018
	)	

AMENDMENT:

Honorable Commissioner for Patents
U.S. Patent and Trademark Office
Randolph Building, Mail Stop Amendments
401 Dulany Street
Alexandria, VA 22314

Sir:

In response to the examiner's action dated September 4, 2018 (hereinafter the "**Action**"), kindly amend the above-identified application as follows:

Amendments to the Claims appear in the Listing of Claims that begins on page 2 of this paper, and

Remarks / Comments begin on page 8 of this paper.

OK TO ENTER: /H.A.K/

10/01/2018

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: BINDER-014-US3

In re Application of:	)	Confirmation No. 1088
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AMENDMENT:

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U.S. Patent and Trademark Office
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Alexandria, VA 22314

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Amendments to the Claims appear in the Listing of Claims that begins on page 2 of this paper, and

Remarks / Comments begin on page 8 of this paper.

Electronic Acknowledgement Receipt

EFS ID:	33816661
Application Number:	15657163
International Application Number:	
Confirmation Number:	1088
Title of Invention:	SYSTEM AND METHOD FOR SERVER-BASED CONTROL
First Named Inventor/Applicant Name:	Yehuda BINDER
Customer Number:	131926
Filer:	Yehuda Binder
Filer Authorized By:	
Attorney Docket Number:	BINDER-014-US3
Receipt Date:	25-SEP-2018
Filing Date:	23-JUL-2017
Time Stamp:	11:31:52
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		After-Final-OA-Response.pdf	131673 4016173a79695225f67de72bc034aaa9d7d623d2	yes	9

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Applicant Arguments/Remarks Made in an Amendment	8	9
	Claims	2	7
	Response After Final Action	1	1
Warnings:			
Information:			
	Total Files Size (in bytes):	131673	

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New International Application Filed with the USPTO as a Receiving Office
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REMARKS / COMMENTS

The claims are improved as a preparation for appeal. Claim 12 is amended to overcome the rejection in section 6 of the Action, and a mistake in claim 1 is corrected.

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The absence of a reply to a specific rejection, issue, or comment, does not signify agreement with that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims that have not been expressed.

Nothing in this reply should be understood as conceding any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claims does not necessarily signify concession of unpatentability to the claim before its amendment. It should further be understood that any filing of a terminal disclaimer to obviate a rejection based on nonstatutory double patenting is not an admission of the propriety of the rejection.

If the above arguments should not now place the application in the condition for allowance, the examiner is invited to call undersigned counsel to resolve any remaining issues.

Respectfully submitted,

By /Yehuda Binder/
Yehuda Binder
Registration No. 73,612

Tel: +972-9-7409241
Mobile: +972-54-4444577
yehuda@maypatents.com

Amazon EX1004 Page 627

Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for operating an actuator in a controlled device in response to captured human voice data, for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building, the method comprising:

capturing, by a microphone in the client device, the human voice data;

sending to the server, by the client device via the wireless network, the captured human voice data;

receiving, by the server over the Internet, the captured human voice data;

processing, by the server, the captured human voice data;

responsive to the processing, sending a message, by the server to the controlled device ~~client~~ over the Internet;

receiving, by the controlled device via the wireless network, the message; and

operating the actuator in the controlled device in response to the received message.

2. (Original) The method according to claim 1, wherein the controlled device is part of, integrated with, or the same as, the client device.

3. (Original) The method according to claim 1, wherein the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person.

4. (Previously Presented) The method according to claim 1, wherein the client device further comprises a sensor that

outputs sensor data that responds to a physical phenomenon, wherein the method further comprising sending to the server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data.

5. (Previously presented) The method according to claim 4, wherein the sensor is a thermoelectric sensor that responds to a temperature or to a temperature gradient of an object using conduction, convection, or radiation, or wherein the sensor is a photoelectric sensor that responds to a visible or an invisible light or gamma rays.

6. (Original) The method according to claim 1, wherein the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon.

7. (Original) The method according to claim 6, wherein the physical phenomenon comprises temperature, humidity, pressure, audio, vibration, light, motion, sound, proximity, flow rate, electrical voltage, or electrical current.

8. (Original) The method according to claim 1, wherein the client device comprises multiple microphones, and wherein the capturing comprises capturing, by the multiple microphones in the client device, the human voice data.

9. (Original) The method according to claim 8, wherein the multiple microphones are arranged as a directional microphones array operative to estimate a number, magnitude, frequency, Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array.

10. (Previously Presented) The method according to claim 1, wherein the microphone is an omnidirectional, unidirectional, or bidirectional microphone that is based on the sensing an incident sound based motion of a diaphragm or a ribbon, or

wherein the microphone comprises a condenser, an electret, a dynamic, a ribbon, a carbon, or a piezoelectric microphone.

11. (Previously presented) The method according to claim 1, wherein the client device or the controlled device are addressable in the wireless network or the Internet using an address stored in a volatile or non-volatile memory of the respective device for uniquely identifying the respective device in the network.

12. (Currently amended) The method according to claim 11, wherein the digital address is a Media Access Control (MAC) layer address that is MAC-48, Extended Unique Identifier (EUI) EUI-48, or EUI-64 address type or wherein the digital address is a layer 3 address and is static or dynamic Internet Protocol (IP) ~~IP~~ address that is IPv4 or IPv6 type address.

13. (Previously presented) The method according to claim 1, wherein the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or Institute of Electrical and Electronics Engineers (IEEE) 802.15.1-2005 standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, or Z-Wave™ standards.

14. (Previously presented) The method according to claim 1, wherein the wireless network is a Wireless Local Area Network (WLAN) that is according to, or base on, IEEE 802.11-2012, IEEE 802.11a, IEEE 802.11b, Institute of Electrical and Electronics Engineers (IEEE) IEEE 802.11g, IEEE 802.11n, or IEEE 802.11ac.

15. (Original) The method according to claim 1, wherein the wireless network uses a wireless communication over a licensed or an unlicensed radio frequency band, that is an Industrial, Scientific and Medical (ISM) radio band.

16. (Previously presented) The method according to claim 1, wherein the wireless network is a cellular telephone network

that is a Third Generation (3G) network that uses Universal Mobile Telecommunications System (UMTS), Wideband Code Division Multiple Access (W-CDMA) UMTS, High Speed Packet Access (HSPA), UMTS Time-Division Duplexing (TDD), CDMA2000 1xRTT, Evolution – Data Optimized (EV-DO), or Global System for Mobile communications (GSM), Enhanced Data rates for GSM Evolution (EDGE) EDGE-Evolution, or wherein the cellular telephone network is a Fourth Generation (4G) network that uses Evolved High Speed Packet Access (HSPA+), Mobile Worldwide Interoperability for Microwave Access (WiMAX), Long-Term Evolution (LTE), LTE-Advanced, Mobile Broadband Wireless Access (MBWA), or is based on IEEE 802.20-2008.

17. (Previously Presented) The method according to claim 1, wherein the client device or the controlled device is integrated in, is part of, or is entirely included in, an appliance.

18. (Original) The method according to claim 17, wherein the primary functionality of the appliance is associated with food storage, handling, or preparation.

19. (Original) The method according to claim 18, wherein the primary function of the appliance is heating food, and wherein the appliance is a microwave oven, an electric mixer, a stove, an oven, or an induction cooker.

20. (Original) The method according to claim 18, wherein the appliance is a refrigerator, a freezer, a food processor, a dishwashers, a food blender, a beverage maker, a coffeemaker, or an iced-tea maker.

21. (Previously presented) The method according to claim 17, wherein the primary function of the appliance is associated with environmental control, and the appliance is part of an Heating, Ventilation and Air Conditioning (HVAC) system.

22. (Original) The method according to claim 21, wherein the primary function of the appliance is associated with temperature control, and wherein the appliance is an air conditioner or a heater.

23. (Previously presented) The method according to claim 17, wherein the primary function of the appliance is associated with cleaning, wherein the appliance primary function is associated with clothes cleaning and the appliance is a washing machine, or wherein the appliance is a vacuum cleaner.

24. (Previously presented) The method according to claim 17, wherein the appliance is an answering machine, a telephone set, a home cinema system, a High Fidelity (HiFi) system, a Compact Disc (CD) or Digital Video Disc (DVD) player, an electric furnace, a trash compactor, a smoke detector, a light fixture, or a dehumidifier.

25. (Original) The method according to claim 1, wherein the actuator is an electric light source for converting electrical energy into light that emits visible or non-visible light for illumination or indication, and the non-visible light is infrared, ultraviolet, X-rays, or gamma rays.

26. (Previously Presented) The method according to claim 25, wherein the electric light source comprises a lamp, an incandescent lamp, a gas discharge lamp, a fluorescent lamp, a Solid-State Lighting (SSL), a Light Emitting Diode (LED), an Organic LED (OLED), a polymer LED (PLED), or a laser diode.

27. (Original) The method according to claim 1, wherein the actuator is a motion actuator that causes linear or rotary motion.

28. (Original) The method according to claim 1, wherein the actuator is a sounder for converting an electrical energy to omnidirectional, unidirectional, or bidirectional pattern emitted, audible or inaudible, sound waves.

29. (Previously presented) The method according to claim 28, wherein the sounder comprises an electromagnetic loudspeaker, a piezoelectric speaker, an electrostatic loudspeaker (ESL), a ribbon or planar magnetic loudspeaker, or a bending wave loudspeaker, or wherein the sounder comprises an electric bell, a buzzer, a chime, a whistle, or a ringer.

30. (Original) The method according to claim 28, wherein the operating of the actuator comprises playing digital audio content that is pre-recorded or synthesized, or wherein the operating of the actuator comprises simulating the voice of a human being or generating music, or wherein the operating of the actuator comprises sounding a syllable, a word, a phrase, a sentence, a short story, or a long story, using male or female voice.

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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 15/657,163	Filing Date 07/23/2017	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 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(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	09/25/2018	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 30	Minus	** 30	= 0	X $50 =	0
	Independent (37 CFR 1.16(h))	* 1	Minus	***3	= 0	X $230 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						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.

LIE
JAMES MASON

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.**
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/657,163	07/23/2017	Yehuda BINDER	BINDER-014-US3	1088

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EXAMINER	
KHAN, HASSAN ABDUR-RAHMAN	

ART UNIT	PAPER NUMBER
2456	

MAIL DATE	DELIVERY MODE
09/04/2018	PAPER

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

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 15/657,163	**Applicant(s)** BINDER et al.	
	Examiner HASSAN A KHAN	**Art Unit** 2456	**AIA Status** No

-- 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 MONTHS 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 07/19/2018.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

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

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ 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*

5) ☑ Claim(s) 1-30 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 1-30 is/are rejected.

8) ☑ Claim(s) 5 and 12 is/are objected to.

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

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

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

11)☐ 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).

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).

Certified copies:

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)).

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

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

2. Claims 5, 11-14, 16, 21, 23, 24 and 29 have been amended.

3. Claims 1- 30 are pending.

Information Disclosure Statement

4. The eight (8) information disclosure statements (IDS) submitted on 07/23/2017 (5), 08/17/2017, 11/29/2017 and 05/29/2018 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements has not being considered by the examiner. It is impractical for the examiner to review the references thoroughly with the number of references cited in the case. By initialing each of the cited references on the accompanying 1449 forms, the examiner is merely acknowledging the submission of the cited references and merely indicating that only a cursory review is made of the cited references. Please identify the top 10-20 references that is the most relevant art, with pinpoint specific citations for review.

An applicant's duty of disclosure of material and information is not satisfied by presenting a patent examiner with "a mountain of largely irrelevant [material] from which he is presumed to have been able, with his expertise and with adequate time, to have found the critical [material]. It ignores the real world conditions under which examiners work." Rohm & Haas Co. v. Crystal Chemical Co., 722 F.2d 1556, 1573 [220 USPQ 289] (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) (Emphasis in original). Patent applicant has a duty not just to (disclose pertinent prior art references but to make a disclosure in such way as not to "bury" it within other disclosures of less relevant prior art; See Golden Valley Microwave Foods Inc. v. Weaver Popcorn Co. Inc., 24 USPQ2d 1801 (N.D Ind. 1992); Molins PLC v. Textron Inc., 26 USPQ2d 1889,

at 1899 (D.Del. 1992); Penn Yan Boats, Inc. v. Sea Lark Boats, Inc. et al., 175 USPQ 260, at 272 (S.D. Fl-1972).

Claim Objections

5. Claim 5 is objected to because it comprises of distinct types of sensors, not related to each other and belong to different embodiments with unique functionalities. The claim contains *thermoelectric sensor* and then also the *light sensor.* Appropriate correction is required.

6. Claim 12 is objected to because of the following informalities: The claim contains terms EUI and IP that are an acronym and not defined in full. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 1 – 30** are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 1 uses the phrase *controlled device* and *client device* interchangeably, however these terms, their relationship and their functionality with respect to each other is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use is unclear and confusing. Detailed explanation with exact examples and diagrams are required for clarification. Correction is required.

8. **Claims 1 – 30** are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 1 uses the phrase

capturing and *captured,* however these terms, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use is unclear and confusing. Detailed explanation with exact examples and diagrams are required for clarification if *capturing* or *captured* involves any storage element or memory etc. Correction is required.

9. **Claims 1 – 30** are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 1 uses the phrase *operating the actuator,* however this term, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use is unclear and confusing. Detailed explanation with exact examples and diagrams are required for clarification if *operating* means a standard actuator response or some form of *remote-controlled* actuator. Also, Claim 1 uses the phrase *server,* however this term is not distinctly defined in the specifications and not pointed out in the drawings and therefore the use is unclear and confusing. Detailed explanation with exact examples and diagrams are required for clarification if *server* means a hardware computer machine or if it means a virtual storage system or if it means some form of a virtual application processor etc. Correction is required.

10. **Claim 2** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 2 uses the phrase *the controlled device is part of, integrated with, or the same as the client device,* however these three different scenarios are not distinctly defined in the specifications and are not pointed out in the drawings. It is unclear how the controlled device can be a part of, integrated with or same as the client device, what are the examples of such arrangements, and their distinct features, and therefore the use is unclear and confusing. Detailed explanation with exact examples are required for clarification. Correction is required.

11. **Claim 3** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 3 uses the phrase *voice recognition algorithm,* however this term, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use and working of *voice recognition algorithm* is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

12. **Claim 4 and 5** are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claims 4 and 5 uses the phrase *sensor data,* however this term, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use and working of *sensor data* is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

13. **Claim 5** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 5 notes that the *thermoelectric sensor* works on *conduction, convection* or *radiation,* however the working of such a *thermoelectric* sensor that can detect or respond to *temperature* or *temperature gradient* using ALL of these methods, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use and working of such *thermoelectric sensor* is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

14. **Claim 6** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 6 uses the phrase *affecting, changing, producing or creating a physical phenomenon,* however this phrase, is not distinctly defined in

the specifications and not pointed out in the drawings, and therefore the use and working of *affecting, changing, producing or creating* is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

15. **Claim 6** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 6 uses the phrase *directly or indirectly,* however this phrase, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use and working of *directly or indirectly* is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

16. **Claim 7** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 7 uses several examples of physical phenomenon, including *audio, sound* and *flow rate,* however the difference between the *audio* and *sound,* and the examples of *flow rate* (e.g. water flow or data flow or vehicle traffic flow etc.), are not distinctly defined in the specifications and not pointed out in the drawings, and therefore their use and working is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

17. **Claim 9** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 9 uses several examples of *microphones array operatives* such as *estimate a number of a phenomenon,* however the details are not distinctly defined in the specifications and not pointed out in the drawings for different operatives regarding every phenomenon, and therefore their use and working is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

18. **Claim 10** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 10 uses several examples of microphones such as *omnidirectional* or *bidirectional,* however details are not distinctly defined in the specifications and not pointed out in the drawings for different operatives regarding such microphones and therefore their use and working is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

19. **Claim 10** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 10 uses several examples of microphones such as *condenser, electret, dynamic, ribbon, carbon, piezoelectric* etc.*,* however the details are not distinctly defined in the specifications and not pointed out in the drawings for different operatives regarding every phenomenon, and therefore their use and working is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

20. **Claim 12** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 12 notes that the *digital address* is a MAC address, and then it also notes that the *digital address* is a layer 3 address, which is not distinctly defined in the specifications and unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

21. **Claim 13** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 13 lists several of the wireless network technologies, however it is unclear how these wireless networks are communicating over the

Internet, and the detailed functionality is not distinctly defined in the specifications and unclear and confusing. Explanation with exact examples and diagrams are required. Correction is required.

22. **Claim 14** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 14 lists several of the local wireless network technologies, however it is unclear how these wireless networks are communicating over the Internet, and the detailed functionality is not distinctly defined in the specifications and unclear and confusing. Explanation with exact examples and diagrams are required. Correction is required.

23. **Claim 15** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 15 uses the phrase *wireless network uses a wireless communication*, however it appears to be grammatically incorrect, and it is unclear how this ISM radio band is used with the sensors, actuators and the server since the detailed functionality is not distinctly defined in the specifications and unclear and confusing. The Office would consider Bluetooth as an example since it uses the ISM frequency. Further, details are required on the licensed and unlicensed bands and how they work on the Internet. Explanation with exact examples and diagrams are required. Correction is required.

24. **Claim 16** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 16 uses several kind of cellular telephone wireless networks, each of which requires a unique and different set of hardware/software settings, however no technical details have been provided as to how ALL of them are supported here, and the absence of detailed functionality makes it unclear and confusing. Explanation with exact examples and diagrams are required. Correction is required.

25. **Claim 17** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 17 notes that the client device or controlled device is *integrated in, is part of, or is entirely included in an appliance,* however these three different scenarios are not distinctly defined in the specifications and are not pointed out in the drawings. Also, it is unclear how the controlled device can be a part of, integrated with or same as the client device (as defined in Claim 2), and then how the controlled device and client device can be a part of, integrated within or entirely included in an appliance (as here in Claim 17). In the absence of the examples of such arrangements, and their distinct features, the use is unclear and confusing. Further, the said appliance is left open-ended and as per the claim, ANY appliance can be considered here (e.g. lawn mower, juicer, stove, refrigerator, can opener, dishwasher, air-conditioner etc.). Therefore, the Applicant is REQUIRED to provide detailed and exhaustive list of all *appliances* with exact examples for clarification. Correction is required.

26. **Claim 18** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 18 uses the term *primary functionality* of the appliance, but DOES NOT provide a complete and detail list of ALL the functionalities of the appliance. Correction is required. Further, the said appliance is claimed to be associated with *food storage, handling, or preparation*, ALL of which are unique and different categories and need to be specifically defined in the specifications, without which the claim is unclear and confusing. As per the claim, ANYTHING related to *food storage, handling or preparation* can be considered an appliance (e.g. a spoon, a fork, coffee cup, cotton candy machine, baby feeder, milk bottle, peanut butter jar, stove, toaster, refrigerator, dishwasher, soap dispenser, kitchen sink etc.). Therefore, the Applicant is REQUIRED to provide DETAILED and EXHAUSTIVE LIST of said *appliances* with exact examples for clarification. These

appliances MUST be related and somewhat interchangeable for a person skill in the art (e.g. a stove and an oven). Correction is required.

27. **Claim 19** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 19 uses the phrase *primary function of the appliance is heating food*, but then it includes *electric mixer* which is not known to heat the food. Hence, the claim DOES NOT provide a complete and detail list of ALL the functionalities of the appliance. Also, all the said appliances in the claim have distinct functionalities, however no technical details have been provided as to how ALL of them are supported here, and the absence of detailed functionality makes it unclear and confusing. Explanation with exact examples and diagrams are required. Correction is required.

28. **Claim 20** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 20 includes a list of appliances, where all the said appliances in the claim have distinct functionalities, however no technical details have been provided as to how ALL of them are supported here, and the absence of detailed functionality makes it unclear and confusing. Further the list of appliances in Claims 19 and Claim 20 are categorically different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required. Correction is required.

29. **Claim 21** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 21 states *HVAC System* but does not further define the components or details about this system. Also, Claim 21 includes a category of appliances (i.e. environmental control) with distinct functionalities, however, the list of appliances in

Claims 18, 19, 20 and Claim 21 are categorically all different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

30. **Claim 22** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 22 includes a category of appliances (i.e. temperature control) with distinct functionalities, however, the list of appliances in Claims 18, 19, 20, 21 and Claim 22 are categorically all different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

31. **Claim 23** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 23 uses the phrase *primary function of the appliance is associated with cleaning* and then it also uses the phrase *primary function is associated with clothes cleaning,* hence it is confusing and unclear as to what is the primary function of the appliance. Also, the claim includes *clothes dryer* which is not known for cleaning. Hence, the claim DOES NOT provide a complete and detail list of ALL the functionalities of the said appliance. Claim 23 includes a category of appliances (i.e. cleaning) with distinct functionalities, however, the list of appliances in Claims 18, 19, 20, 21, 22 and Claim 23 are categorically all different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

32. **Claim 24** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 24 includes a plurality of

appliances bundled together without any rationale since each of which belongs to a separate category of appliances (i.e. communications, media player, lighting etc.) with distinct functionalities. The list of appliances in Claims 18, 19, 20, 21, 22, 23 and Claim 24 are categorically all different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

33. **Claim 25** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 25 includes an actuator that emits light using electrical energy, however the various type of light (e.g. x-rays, gamma rays, infrared) requires specialized hardware, and are categorically all different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required about this actuator that can fulfill EACH of these claimed limitations, and the applicant MUST address as to in what aspect or functionality, all of these various kind of lights have been considered by the applicant to be in the same invention. Correction is required.

34. **Claim 26** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 26 includes a plurality of electric light sources bundled together without any rationale since each of which belongs to a separate category of light source (i.e. OLED, Incandescent Lamp etc.) and are all different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required about this electric light source that can fulfill EACH of these claimed limitations, and the applicant MUST address as to in what aspect or functionality, all of these various kind of light sources have been considered by the applicant to be in the same invention. Correction is required.

35. **Claim 27** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 27 includes an actuator that produces a linear/rotary motion, however the details are missing and making it unclear and confusing as to how the actuator is producing these motions, it is a command activated electrical powered actuator, or it is a tension spring-based actuator, or something else. Also, the said linear and rotary motions are two distinct functionalities, and are not interchangeable. No technical details have been provided as to how EACH of them are supported here, and the absence of detailed functionality makes it unclear and confusing. Explanation with exact examples and diagrams are required. Correction is required.

36. **Claim 28** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 28 includes an actuator that produces sound with various patterns, however the details are missing and making it unclear and confusing as to how the actuator is producing these sounds waves. The list of actuators in Claims 6, 7, 27 and 28 includes *actuator* that are categorically all different and not interchangeable. No technical details have been provided as to how EACH of them are supported here. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

37. **Claim 29** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 29 includes a list of sounder elements that generate sounds (e.g. a loudspeaker or a whistle etc.), however the list of sounders includes elements that are categorically all different and not interchangeable. No technical details have been provided as to how EACH of them are supported here. Therefore, detailed explanation with exact

examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

38. **Claim 30** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 30 includes a list of responses by the actuator however the list of responses includes elements that are categorically all different and not interchangeable. No technical details have been provided as to how EACH of them are supported here. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

39. **Claims 1 - 30** are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

a. **Following the 2014 Interim Eligibility Guidance:**

i. **STEP 1 Analysis:** The claims are directed to a method related with the router, sensor(s), actuator(s) and devices(s) in a building or in a vehicle, and are therefore a statutory **(Step 1: YES)**.

ii. **STEP 2A Analysis:** The claim(s) recite(s) the steps to the assembly and working of a method using various components for use in a building, including a microphone to

capture the human voice, sending the data to an internet-connected server, processing the voice data, generating and sending a message to an internet connected controlled device to operate an actuator in response to the received message, all which is an abstract idea similar to the concepts that have been identified as abstract by the courts, such as [*collecting information, analyzing it, and displaying certain results of the collection and analysis, Electric Power Group*]. Therefore, the claim(s) is/are directed to an abstract idea

(Step 2A: YES)

iii. **STEP 2B Analysis:**

(1) The claim(s) recite(s) the additional element(s)/limitation(s) of *commanding an actuator in response to a received message associated with the captured human voice data, a server connected over the internet to receive, process and transmit the human voice data and related messages, and an actuator in the controlled device,* which when taken individually amounts to routine and conventional functionalities. The Applicant demonstrated prior art in (Fig. 1 and ¶0033), where the sensors and home devices are communicating via external servers over internal and external networks, and sending and receiving voice and audio data packet messages (¶0034-¶0036). The applicant also discussed Z-Wave, a wireless communications protocol designed for home automation, specifically for remote control applications in residential and light commercial environments, by sending and receiving control commands over the network (¶0017-¶0018). Hence, from reviewing the presented sections from the BACKGROUND section of the applicants' specifications, it is well understood that the claims are directed to routine and conventional functionalities, and when

taken individually, the additional element(s) of the claim(s) does not provide significantly more to the abstract idea claimed.

(2) The combination of all elements as a whole are no more than the sum of their parts, and provides nothing more than [a method for operating actuator in a controlled device by capturing human voice, processing the voice data and transmitting the command messages over the internet]. The claim(s) does not improve another technology or technical field; nor improve the functioning of a computer itself, nor is the invention implemented using a particular machine. For these reasons, the claim(s) is/are ineligible **(Step 2B: No)**

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 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 negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims the examiner presumes that the subject matter of the various claims was commonly owned as of the effective filing date of the claimed invention(s) absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and effective filing dates of each claim that was not commonly owned as of the effective filing date of the later invention in order for the examiner to consider the applicability of 35 U.S.C. 102(b)(2)(C) for any potential 35 U.S.C. 102(a)(2) prior art against the later invention.

40. Claims 1 - 30 are rejected under 35 U.S.C. 103 as being unpatentable over US Patent Application Publication No. 2007/0283005 to Beliles et al. (hereinafter Beliles), in view of US Patent Application Publication No. 2009/0089065 to Buck et al. (hereinafter Buck) and in view of US Patent Application Publication No. 2012/0253480 to Abe.

Regarding Claim 1, Beliles discloses (in ¶0004) a method and system for dynamically responding to non-network events at a network device in a computer network that further includes:

a method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising; Beliles discloses (in ¶0015, ¶0016 and ¶0034) a building such as a server room with installed network-attached sensors, that transmits the data over a network such as the Internet (i.e. external network), to destination devices such as a monitoring system or a control room (i.e. control server) using network devices such as routers in case of the non-network events (e.g. fires, floods, unauthorized physical access etc.).

Beliles does not explicitly disclose capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data, operating an actuator in a controlled device in response to captured human voice data, receiving,

by the server over the Internet, the captured human voice data. However, in an analogous art, Buck teaches:

capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data; Buck teaches capturing human voice data using the microphones (in ¶0031) and then transmitting to external devices using a wireless network (¶0050).

operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data; Buck teaches that (¶0028) one or more tangible or wireless vehicle buses 408 (that may interface a wireless service provider) may convey the control signals and/or actuator signals to one or more local or remote (e.g., out-of-vehicle) destinations (i.e. and external server connected over the internet). Buck teaches that (¶0032) a speech recognition processor or software may recognize the command which may initiate a recording, (e.g., by opening or generating one or more data files that are retained in a local or remote memory). The speech recognition and control process may interface a physical or a wireless bus system that interfaces in-vehicle and/or out-vehicle devices and networks. Buck teaches that spoken words are converted into recognizable commands and in response the actuator may perform an action (in ¶0028). The devices may provide electronic and/or mechanical adjustments (e.g., through actuators, servo-motors, sensor thresholds, visual/aural setting, etc.) that may be used to adjust mechanical and/or electronic elements and devices.

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising, as disclosed by Beliles, and capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data, operating an actuator in a

controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data, as taught by Buck, for the purpose of implementing the process to adjusts one or more devices using the speech patterns, accents and natural language processing (Buck, ¶0018).

Beliles in view of Buck does not explicitly disclose processing, by the server, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message. However, in an analogous art, Abe teaches:

processing, by the server, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message; Abe teaches (in Fig. 15) a control apparatus is connected to a plurality of networks through the internet and includes a sensor information acquisition section, a sensor information accumulation section, a control command determination section, a control rule accumulation section, a communication section and a device control section. The control command determination section determines the control command on the basis of the sensor information and the control rules (i.e. control logic), and accordingly the device control section controls each of the devices by outputting the control command determined in the control command determination section to the devices to be controlled (¶0050 and ¶0051).

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine the method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising, and capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data, operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data, as disclosed by Beliles in view of Buck, and processing, by the server, responsive to the processing, sending

a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message, as taught by Abe, for the purpose of implementing an internet-connected control server that communicates with home network to monitor the conditions via sensors and sends the control command over the wireless internet to the controlled device when an abnormality occurs (Abe, Figs. 15 and 16, ¶0104 and ¶0105).

Regarding Claim 2, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the controlled device is part of, integrated with, or the same as, the client device; Buck teaches (in ¶0020) that the controlled device (i.e. seating system, electronic entertainment, mirror controls or navigation device etc.) are part of the client device (i.e. vehicle or vehicle related system).

Regarding Claim 3, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person; Buck teaches (in ¶0037 and ¶0038) that to recognize a spoken word, the process may compute a most likely sequence of states through the Hidden Markov Models (HMM). This process may be performed through a Viterbi algorithm, which may iteratively determine the most likely path through the associated trellis. Individual voice characteristics of a speaker (user) may be stored locally or remotely in a central location (e.g., in a relational database that may be structured as the database described above) to identify speakers.

Regarding Claim 4, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Beliles discloses:

wherein the client device further comprises a sensor that outputs sensor data that responds to a physical phenomenon, wherein the method further comprising sending to the server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data; Beliles discloses (in Fig. 6 and ¶0052) one or more sensors automatically detects one or more non-network events (i.e. sensor data that responds to a physical phenomenon), and notifications of the non-network events are then transmitted over the network to one or more destination network devices. Beliles discloses (in ¶0054) that in response to the received notifications, the network device generates a response (i.e. a message) such as an instruction by the network device to one or more network-attached physical control devices to modify one or more physical parameters based on the applied policy.

Regarding Claim 5, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 4. Further, Beliles discloses:

wherein the sensor is a thermoelectric sensor that responds to a temperature or to a temperature gradient of an object using conduction, convection, or radiation, wherein the sensor is a photoelectric sensor that responds to a visible or an invisible light, the invisible light is infrared, ultraviolet, X-rays, or gamma rays, wherein the photoelectric sensor is based on the photoelectric or photovoltaic effect, and comprises a semiconductor component that comprises a photodiode, a phototransistor, or a solar cell, or wherein the photoelectric sensor is based on Charge-Coupled Device (CCD) or a Complementary Metal-Oxide Semiconductor (CMOS) element; Beliles discloses (in ¶0028) that one or more sensors, such as motion sensor 121, smoke sensor 122, fire sensor 123, or other network-attached sensors (e.g. thermoelectric sensor, moisture sensors, etc.) may be attached to the

network through one or more network-attached sensor translators 131 and 132, or may be directly attached to the network (e.g., a sensor 124 with integrated translator) themselves.

Regarding Claim 6, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon; Buck teaches (in ¶0032) that the speech recognition and control process may interface a physical or a wireless bus system that interfaces in-vehicle and/or out-vehicle devices and networks. The devices may provide electronic and/or mechanical adjustments (e.g., through actuators, servo-motors, sensor thresholds, visual/aural setting, etc.) that may be used to adjust mechanical (i.e. physical) and/or electronic elements and devices.

Regarding Claim 7, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the physical phenomenon comprises temperature, humidity, pressure, audio, vibration, light, motion, sound, proximity, flow rate, electrical voltage, or electrical current; Buck teaches (in ¶0028) the phrase may actuate one or more operations such as the position of one or more seats, one or more mirrors, or communicate or program one or more powertrain, chassis, climate, entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc.). In other processes, the operation may tune a pass band of a bandwidth filter (e.g., select an audio channel), adjust a volume level, a treble setting, a bass setting, a balance control, and/or other aural settings.

Regarding Claim 8, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the client device comprises multiple microphones, and wherein the capturing comprises capturing, by the multiple microphones in the client device, the human voice data; Buck teaches (in ¶0031) some systems interface one or more microphones or a microphone array that includes two or more directional microphones (e.g., multiple directional microphones).

Regarding Claim 9, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 8. Further, Buck discloses:

wherein the multiple microphones are arranged as a directional microphones array operative to estimate a number, magnitude, frequency, Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array; Buck teaches (in ¶0031) some systems interface one or more microphones or a microphone array that includes two or more directional microphones (e.g., multiple directional microphones).

Regarding Claim 10, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the microphone is an omnidirectional, unidirectional, or bidirectional microphone that is based on the sensing an incident sound based motion of a diaphragm or a ribbon, or wherein the microphone comprises a condenser, an electret, a dynamic, a ribbon, a carbon, or a piezoelectric microphone; the multiple microphones are arranged as a directional microphones array operative to estimate a number, magnitude, frequency, Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array; Buck teaches (in ¶0031) that to convert sound into

analog signals or digital signals, some systems interface one or more microphones or a microphone array that includes two or more directional microphones (e.g., multiple directional microphones).

Regarding Claim 11, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Beliles discloses:

wherein the client device or the controlled device are addressable in the wireless network or the Internet using distinct locally administered addresses or a universally administered digital addresses stored in a volatile or non-volatile memory of the respective device and uniquely identifying the respective device in the network; Beliles teaches (in ¶0035 - ¶0039) that the network device send a notification using the TCP/IP data packets, and the message includes one or more headers 310 (e.g., IP/ATM headers, etc.), and a data field 320. Source address 312 and destination address 314 within the header 310 are the network addresses for the sending device (e.g., sensor translators) and the receiving device (e.g., a monitor/control system 140), respectively. Further, the memory 240 comprises a plurality of storage locations that are addressable by the processor 220 and the network interfaces 210 for storing software programs and data structures associated with the present invention (¶0032).

Regarding Claim 12, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Beliles discloses:

wherein the digital address is a MAC layer address that is MAC-48, EUI-48, or EUI-64 address type or wherein the digital address is a layer 3 address and is static or dynamic IP address that is IPv4 or IPv6 type address; Beliles teaches (in ¶0035 - ¶0039) that the network device send a notification using the TCP/IP data packets, and the message includes one or more headers (e.g., IP/ATM headers, etc.), and a data field. Source address and destination address within the header are the network addresses (i.e.

MAC layer addresses and/or IP addresses) for the sending device (e.g., sensor translators) and the receiving device (e.g., a monitor/control system), respectively.

Regarding Claim 13, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, orZ-Wave™ standards; Buck teaches (in ¶0052) that the speech recognition controller may be compliant with a Wi-Fi protocols or multiple protocols or subsets (e.g., ZigBee, High Speed Packet Access (e.g., High Speed Downlink Packet Access and/or High Speed Uplink Packet Access), Bluetooth, Mobile-Fi, Ultrawideband, Wi-Fi, WiMax, mobile WiMax, cellular, satellite, etc.

Regarding Claim 14, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Beliles discloses:

wherein the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, orZ-Wave™ standards; Beliles teaches (in Fig. 1 and ¶0027) a schematic block diagram of an exemplary computer network 100 comprising a plurality of devices interconnected to a network cloud 110, such as, e.g., a wide area network (WAN), local area network (LAN), etc.

Regarding Claim 15, does not teach or further define over the limitation in claim 13 respectively. Therefore claim 15 is rejected for the same rationale of rejection as set forth in claim 13.

Regarding Claim 16, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the wireless network is a cellular telephone network, that is a Third Generation (3G) network that uses UMTS W-CDMA, UMTS HSPA, UMTS TDD, CDMA2000 lxRTT, CDMA2000 EV-DO, or GSM EDGE-Evolution, and wherein the cellular telephone network is a Fourth Generation (4G) network that uses HSPA+, Mobile WiMAX, LTE, LTE-Advanced, MBWA, or is based on IEEE 802.20-2008; Buck teaches (in ¶0052) a cellular or wireless protocol, a wireless or cellular telephone, a radio, a satellite, or other wireless communication system may link the speech recognition controller 404 transceivers 414 to a privately accessible or publicly accessible distributed network. The system may be complaint with WiMax or IEEE 802.16a or may have a frequency band within a range of about 2 to about 11 GHz, a range of about 31 miles, and a data transfer rate of about 70 Mbps. In other applications, the speech recognition controller may be compliant with a Wi-Fi protocols or multiple protocols or subsets (e.g., ZigBee, High Speed Packet Access (e.g., High Speed Downlink Packet Access and/or High Speed Uplink Packet Access), Bluetooth, Mobile-Fi, Ultrawideband, Wi-Fi, WiMax, mobile WiMax, cellular, satellite, etc., referred to as the transceiver protocols) that may be automatically detected and selected and may enable this automatic access through one or more communication nodes.

Regarding Claim 17, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Abe discloses:

wherein the client device or the controlled device is integrated in, is part of, or is entirely included in, an appliance; Abe teaches (in ¶0034) a control apparatus that acquires sensor information and determines a control command to control a plurality of home appliances (e.g. refrigerator, stove, oven, microwave, dishwasher, washing machine, television etc.) such as an air conditioner.

Regarding Claim 18, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Abe discloses:

wherein the client device or the controlled device is integrated in, is part of, or is entirely included in, an appliance; Abe teaches (in ¶0036) a control apparatus that acquires sensor information and determines a control command to control a plurality of home appliances, such as an air conditioner.

Regarding Claim 19, does not teach or further define over the limitation in claim 17 respectively. Therefore claim 19 is rejected for the same rationale of rejection as set forth in claim 17.

Regarding Claim 20, does not teach or further define over the limitation in claim 17 respectively. Therefore claim 20 is rejected for the same rationale of rejection as set forth in claim 17.

Regarding Claim 21, does not teach or further define over the limitation in claim 17 respectively. Therefore claim 21 is rejected for the same rationale of rejection as set forth in claim 17.

Regarding Claim 22, does not teach or further define over the limitation in claim 17 respectively. Therefore claim 22 is rejected for the same rationale of rejection as set forth in claim 17.

Regarding Claim 23, does not teach or further define over the limitation in claim 17 respectively. Therefore claim 23 is rejected for the same rationale of rejection as set forth in claim 17.

Regarding Claim 24, does not teach or further define over the limitation in claim 17 respectively. Therefore claim 24 is rejected for the same rationale of rejection as set forth in claim 17.

Regarding Claim 25, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the actuator is an electric light source for converting electrical energy into light that emits visible or non-visible light for illumination or indication, and the non-visible light is infrared, ultraviolet, X-rays, or gamma rays; Buck teaches (¶0032) that the devices may provide electronic and/or mechanical adjustments (e.g., through actuators, servo-motors, sensor thresholds, visual/aural setting, etc.) that may be used to adjust mechanical and/or electronic elements and devices (e.g. controlling the headlights, cabin lights or the fog-lights, controlling the audio speakers and volume, controlling the digital media player, controlling the windows up/down function).

Regarding Claim 26, does not teach or further define over the limitation in claim 25 respectively. Therefore claim 26 is rejected for the same rationale of rejection as set forth in claim 25.

Regarding Claim 27, does not teach or further define over the limitation in claim 25 respectively. Therefore claim 27 is rejected for the same rationale of rejection as set forth in claim 25.

Regarding Claim 28, does not teach or further define over the limitation in claim 25 respectively. Therefore claim 28 is rejected for the same rationale of rejection as set forth in claim 25.

Regarding Claim 29, does not teach or further define over the limitation in claim 25 respectively. Therefore claim 29 is rejected for the same rationale of rejection as set forth in claim 25.

Regarding Claim 30, does not teach or further define over the limitation in claim 25 respectively. Therefore claim 30 is rejected for the same rationale of rejection as set forth in claim 25.

Response to Arguments

Claim Rejections - 35 USC § 112

41. Applicant's arguments and amendments filed on 07/19/2018 with respect to Claims 1 – 30 have been fully considered but they are not persuasive, hence the 35 USC § 112 rejection is maintained.

In response to applicant argument (Pg. 9), *"it is clear from the Action that the scope is understood to the Examiner, and that the Examiner only requires to narrow the claim and limit it,"* the Office maintains the rejection under 35 USC § 112 since these terms are not well known in the art, and in particular, requires specific clear details about their implementation and functioning. Applicant is encouraged to provide the exact details and distinctly define the working and scope of these unclear and confusing phrases in Claims 1 – 30. Detailed explanation with exact examples and diagrams are required. Correction is required.

In response to applicant argument (Pg. 10), *"even if there were a lack of descriptive support, which is not, as discussed herein, the absence of descriptive support alone does not necessarily demonstrate indefiniteness,"* the Office maintains the rejection under 35 USC § 112 since these terms are not well known in the art, and, the applicant is encouraged to point in the drawings and specifications the exact details, and distinctly define the working and scope of these unclear and confusing phrases, as noted in Claims 1 – 30. Detailed explanation with exact examples and diagrams are required. Correction is required.

In response to applicant argument (Pg. 10), *"as admitted in the Action itself, the specification clearly describes all elements in the claim, and provides various examples and embodiments, and it is noted that there is no magical relation between the number of representative examples and the breadth of the claims; the number and variety of examples are Irrelevant if the disclosure is enabling,"* the Office maintains the rejection under 35 USC § 112 since these terms are not well known in the art, and, the

applicant is encouraged to point in the drawings and specifications the exact details, and distinctly define the working and scope of these unclear and confusing phrases, as noted in Claims 1 – 30. Detailed explanation with exact examples and diagrams are required. Correction is required.

Claim Rejections - 35 USC § 101

42. Applicant's arguments in the Appeal Brief filed on 07/19/2018 with respect to Claims 1 – 30 have been fully considered but they are not persuasive, hence the 35 USC § 101 rejection is maintained.

In response to applicant argument (Pgs. 11 and 12), *"no support for routine and conventional functionalities … further, while the specifications may have shown that some claim elements are known, the specifications does not state, and the Answer does not show, that any single element, or any combination thereof, is well-understood, routine, and conventional ,"* the Office maintains the rejection under § 101 since the Applicant demonstrated prior art in (Fig. 1 and ¶0033), where the sensors and home devices are communicating via external servers over internal and external networks, and sending and receiving voice and audio data packet messages (¶0034-¶0036). The applicant also discussed Z-Wave, a wireless communications protocol designed for home automation, specifically for remote control applications in residential and light commercial environments, by sending and receiving control commands over the network (¶0017-¶0018). Hence, from reviewing the presented sections from the BACKGROUND section of the applicants' specifications, it is well understood that the claims are directed to routine and conventional functionalities, and when taken individually, the additional element(s) of the claim(s) does not provide significantly more to the abstract idea claimed.

In response to applicant argument (Pg. 13), *"hence the claims are directed to multiple computers, connected to multiple sensors / actuators, such as forming a control system, and thus clearly distinct from a single computer functionality as stated in the rejection … further there is no collecting information, the invention is clearly directed to generating information by a microphone and not merely collecting existing*

information," the Office maintains the rejection under § 101 since Beliles demonstrated in (¶0015, ¶0016 and ¶0034) a plurality of network-attached sensors transmitting data over a network to destination devices such as a monitoring system or a control room using network devices such as routers in case of the non-network events (e.g. fire, floods etc.). Moreover, the applicants are claiming that a microphone is *capturing* the human voice data, which the Office considers as *collecting* information.

Claim Rejections - 35 USC § 103

43. Applicant's arguments in the Appeal Brief filed on 07/10/2018 with respect to Claims 1 – 30 have been fully considered and the 35 USC § 103 rejection is maintained.

In response to applicant argument (Pg. 15), *"the Beliles reference is not in analogous field … and the Beliles reference focuses on a wired network,"* the Office maintains the rejection under § 103 since Beliles reference is in an analogous art and it discloses (in ¶0004) a method and system for dynamically responding to non-network events at a network device in a computer network, where the network can be a physical network, wireless network, virtual network etc. (Beliles, ¶0027).

In response to applicant arguments (Pg. 15), *"first, the Beliles reference in general, and the cited paragraphs in particular, are silent regarding any device communicating over a wireless network to an 'Internet-connected server', and in particular any communication with any device external to the building, second, the Beliles invention dictates that decisions to activate any actuator are based on a policy table 400 that is part of a network device in the building,"* the Office maintains the rejection under § 103 since Beliles reference discloses (in ¶0034) one or more internet connected monitoring/control systems 140.

In response to applicant arguments (Pg. 15), *"claimed invention recites operating an actuator in response to capturing human voice, hence referring to intentional and deliberate actuator control by a human, in contrast, the Beliles invention focuses on security and safety automatic operation without any human intervention, and for detecting unwanted problems or disasters such as fire, radiation, explosion,*

earthquake," the Office maintains the rejection under § 103 since Buck reference discloses Buck teaches capturing human voice data using the microphones (in ¶0031) and then transmitting to external devices using a wireless network (¶0050). Further, Buck teaches that (¶0032) a speech recognition processor or software may recognize the command which may initiate a recording, (e.g., by opening or generating one or more data files that are retained in a local or remote memory). The speech recognition and control process may interface a physical or a wireless bus system that interfaces in-vehicle and/or out-vehicle devices and networks. Buck teaches that spoken words are converted into recognizable commands and in response the actuator may perform an action (in ¶0028). The devices may provide electronic and/or mechanical adjustments (e.g., through actuators, servo-motors, sensor thresholds, visual/aural setting, etc.) that may be used to adjust mechanical and/or electronic elements and devices.

In response to applicant arguments (Pgs. 15 and 16), "*the Appellant submits that the Beliles and Buck references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Action does not explain, as required by the rules, what is the reasoning behind the combining of the Beliles and Buck references, and why these references are analogous to each other. Further, it is noted that the Action does not explain if and why the Buck reference is analogous and may be combined to the Beliles reference as required by the MPEP,"* the Office maintains the rejection under § 103 and the Examiner notes that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Further, the Office notes that both the Beliles and Buck references are capturing the data collected from physical sensors, transmitting the data to an external network, processing the data at the monitoring/control server, receiving the commands for controlling

the actuator from the monitoring/control server over the external network and controlling the actuator per the received commands (see Beliles ¶0028 and Buck ¶0032,¶0049).

In response to applicant arguments (Pgs. 16 and 17), "*the rationale is improperly treated as a 'moving target' as required for the rejection ... the Beliles is directed to automatic and human-free environment using various environmental sensors … hence Beliles teaches away from any human intervention in general, and human voice capturing or processing in particular*," the Office maintains the rejection under § 103 and the Examiner notes that both the reference are in an analogous art since the Beliles reference is controlling the actuators based on the data (sensors), and the Buck reference is also controlling the actuators based on the data (human voice). The Examiner notes that the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant arguments (Pgs. 18 and 19), "*how and where the Abe reference discloses that the recited limitation*," the Office maintains the rejection under § 103 and notes that the limitation *'processing, by the server, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message'* is clearly taught by Abe (in Fig. 15) where a control apparatus is connected to a plurality of networks through the internet and includes a sensor information acquisition section, a sensor information accumulation section, a control command determination section, a control rule accumulation section, a communication section and a device control section. The control command determination section determines the control command on the basis of the sensor information and the control rules (i.e. control logic), and accordingly the device control section controls each of the devices by outputting the control command determined in the control command determination section to the devices to be controlled (¶0050 and ¶0051).

In response to applicant arguments (Pg. 20), "*all these claims clearly teach new limitations or defines former mentioned limitations,*" the Office maintains the rejection under § 103 and notes that in judging the patentability of the claims 18-24 and 26-30 against the prior art, it is noted that the limitations in Claims 18-24 and 26-30 are simply the examples of an 'appliance' and 'actuator' as previously presented in other claims, and are not teaching any new limitations, or further defining over previously mentioned limitations, and does not limit the scope when given their broadest reasonable interpretation, hence rejected for the same rationale of rejection as set forth in previous claim.

Conclusion

44. 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.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HASSAN KHAN whose telephone number is (313) 446-6574. The examiner can normally be reached on MONDAY - THURSDAY: 8AM-6PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Chea can be reached on (571) 272-3951. 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. 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.

/Hassan A. Khan/
Examiner, Art Unit 2456
/TOM Y CHANG/
Primary Examiner, Art Unit 2456

Notice of References Cited	Application/Control No. 15/657,163	Applicant(s)/Patent Under Reexamination BINDER et al.	
	Examiner HASSAN A KHAN	Art Unit 2456	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20160062330-A1	03-2016	Abe; Yuuichi	G08C17/02	700/12
*	B	US-20070283005-A1	12-2007	Beliles; Robert P.	H04L41/0816	709/224
*	C	US-20100071053-A1	03-2010	Ansari; Amir	G06Q30/04	726/12
*	D	US-20130091279-A1	04-2013	Haddad; Wassim	H04L12/2834	709/225
*	E	US-20080307075-A1	12-2008	Urano; Takehiro	G06F1/14	709/220
*	F	US-20090089065-A1	04-2009	Buck; Markus	B60R16/0373	704/275
*	G	US-20170272316-A1	09-2017	Johnson; Michael W.	H04L41/28	1/1
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC 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.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/657,163	BINDER et al.
	Examiner	**Art Unit**
	HASSAN A KHAN	2456

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

CLAIMS

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

CLAIM		DATE								
Final	Original	09/29/2017	01/19/2018	06/18/2018	08/30/2018					
	1	✓	✓	✓	✓					
	2	✓	✓	✓	✓					
	3	✓	✓	✓	✓					
	4	✓	✓	✓	✓					
	5	✓	✓	✓	✓					
	6	✓	✓	✓	✓					
	7	✓	✓	✓	✓					
	8	✓	✓	✓	✓					
	9	✓	✓	✓	✓					
	10	✓	✓	✓	✓					
	11	✓	✓	✓	✓					
	12	✓	✓	✓	✓					
	13	✓	✓	✓	✓					
	14	✓	✓	✓	✓					
	15	✓	✓	✓	✓					
	16	✓	✓	✓	✓					
	17	✓	✓	✓	✓					
	18	✓	✓	✓	✓					
	19	✓	✓	✓	✓					
	20	✓	✓	✓	✓					
	21	✓	✓	✓	✓					
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	25	✓	✓	✓	✓					
	26	✓	✓	✓	✓					
	27	✓	✓	✓	✓					
	28	✓	✓	✓	✓					
	29	✓	✓	✓	✓					
	30	✓	✓	✓	✓					

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/657,163	BINDER et al.
	Examiner	Art Unit
	HASSAN A KHAN	2456

CPC - Searched*		
Symbol	**Date**	**Examiner**
H04L67/12, B60K 31/00, B60K 31/18, B60Y2200/11, B60Y2200/12, B60Y2200/126, B60Y2200/13, B60Y2200/30, B60Y2200/40, B60Y2200/50, B60Y2200/90, G01C 21/00, G06Q2240/00, G07C 5/008, G08G 1/00 (combined wit	9/29/2017	H.K.
B60K 31/00, B60K 31/18, B60Y2200/11, B60Y2200/12, B60Y2200/126, B60Y2200/13, B60Y2200/30, B60Y2200/40, B60Y2200/50, B60Y2200/90	01/19/2018	H.K.
H04L67/12, G01C 21/00, G06Q2240/00, G07C 5/008, G08G 1/00 (combined with text search)	01/19/2018	H.K.
B60K 31/00, B60K 31/18, B60Y2200/11, B60Y2200/12, B60Y2200/126, B60Y2200/13, B60Y2200/30, B60Y2200/40, B60Y2200/50, B60Y2200/90	6/18/2018	H.K.
H04L67/12, G01C 21/00, G06Q2240/00, G07C 5/008, G08G 1/00 (combined with text search)	6/18/2018	H.K.
B60K 31/00, B60K 31/18, B60Y2200/11, B60Y2200/12, B60Y2200/126, B60Y2200/13, B60Y2200/30, B60Y2200/40, B60Y2200/50, B60Y2200/90	08/30/2018	H.K.
H04L67/12, G01C 21/00, G06Q2240/00, G07C 5/008, G08G 1/00 (combined with text search)	08/30/2018	H.K.

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
709	218 (combined with text search)	9/29/2017	H.K.
709	218 (combined with text search)	01/19/2018	H.K.
709	218 (combined with text search)	6/18/2018	H.K.
709	218 (combined with text search)	08/30/2018	H.K.

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

/HASSAN A KHAN/ Examiner, Art Unit 2456	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/657,163	BINDER et al.
	Examiner	Art Unit
	HASSAN A KHAN	2456

Search Notes		
Search Notes	**Date**	**Examiner**
Assignee search conducted (see EAST search history)	9/29/2017	H.K.
Google Patents search conducted	9/29/2017	H.K.
Inventor search conducted (see EAST search history)	9/29/2017	H.K.
EAST Search History (see attached)	9/29/2017	H.K.
Assignee search conducted (see EAST search history)	01/19/2018	H.K.
Inventor search conducted (see EAST search history)	01/19/2018	H.K.
EAST Search History (see attached)	01/19/2018	H.K.
Assignee search conducted (see EAST search history)	6/18/2018	H.K.
Inventor search conducted (see EAST search history)	6/18/2018	H.K.
EAST Search History (see attached)	6/18/2018	H.K.
Assignee search conducted (see EAST search history)	08/30/2018	H.K.
Inventor search conducted (see EAST search history)	08/30/2018	H.K.
EAST Search History (see attached)	08/30/2018	H.K.

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**

/HASSAN A KHAN/ Examiner, Art Unit 2456	

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	5775	709/218.ccls.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L5	16337	H04L67/12.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L6	30893	B60K 31/00.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L7	30893	B60K 31/18.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L8	307	B60Y2200/11.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L9	964	B60Y2200/12.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L10	228	B60Y2200/126.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L11	372	B60Y2200/13.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L12	47	B60Y2200/30.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L13	139	B60Y2200/40.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L14	28	B60Y2200/50.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L15	117	B60Y2200/90.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L16	43002	G01C 21/00.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L17	267	G06Q2240/00.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L18	12674	G07C 5/008.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L19	52730	G08G 1/00	US-PGPUB;	OR	ON	2018/08/30 15:54

			USPAT			
L20	20427	G08G 1/00.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L21	48	(may and patents).as.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L22	56	(may and patents).aanm.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L23	396	(binder and yehuda).in.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L24	44	(maytal and benjamin).in.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L25	16337	H04L67/12.cpc.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L26	19576	709/218.ccls..	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L27	44	(maytal and benjamin).in.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L28	396	(binder and yehuda).in.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L29	56	(may and patents).aanm.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L30	48	(may and patents).as.	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L31	167168	L4 L5 L6 L7 L8 L9 L10 L11 L12 L13 L14 L15 L16 L17 L18 L19 L20 L21 L22 L23 L24 L25 L26 L27 L28 L29 L30	US-PGPUB; USPAT	OR	ON	2018/08/30 15:54
L32	1	L31 and (human with voice with actuator with client).clm.	US-PGPUB; USPAT	ADJ	ON	2018/08/30 15:54

EAST Search History (Interference)

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/657,163	07/23/2017	Yehuda BINDER	BINDER-014-US3	1088

131926 7590 07/19/2018

May Patents Ltd. c/o Dorit Shem-Tov
P.O.B 7230
Ramat-Gan, 5217102
ISRAEL

EXAMINER
KHAN, HASSAN ABDUR-RAHMAN

ART UNIT	PAPER NUMBER
2456	

MAIL DATE	DELIVERY MODE
07/19/2018	PAPER

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

The time period for reply, if any, is set in the attached communication.

Applicant-Initiated Interview Summary	**Application No.** 15/657,163	**Applicant(s)** BINDER ET AL.	
	Examiner HASSAN KHAN	**Art Unit** 2456	

All participants (applicant, applicant's representative, PTO personnel):

(1) *Examiner HASSAN KHAN*. (3)_____.

(2) *Yehuda Binder (REG # 73612)*. (4)_____.

Date of Interview: *17 July 2018*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☐103 ☒Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: _____.

Identification of prior art discussed: _____.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

The Examiner called the Applicant 07/10/2018 at 10:40am at the phone number (617)332-5539 and left a VM with proposed alternate interview date/time of 7/17/2018 at 3pm EST. No reply of confirmation was received by the Office. On the interview date/time (7/17/2018 at 3pm EST), however, the person who attended the phone call said that this is the wrong number and that they did not scheduled any interview with the USPTO. It is suggested, that for future interviews, please provide a CORRECT reachable working phone number.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/HASSAN KHAN/ Examiner, Art Unit 2456	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

———

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: BINDER-014-US3

In re Application of:	)	Confirmation No. 1088
	)	
Yehuda BINDER	)	Art Unit: 2456
	)	
Appln. No.: 15/657,163	)	Examiner: Khan, Hassan A.
	)	
Filed: July 23, 2017	)	Washington, D.C.
	)	
For: System and method for Server-based control	)	July 10, 2018
	)	

AMENDMENT:

Honorable Commissioner for Patents
U.S. Patent and Trademark Office
Randolph Building, Mail Stop Amendments
401 Dulany Street
Alexandria, VA 22314

Sir:

In response to the examiner's action dated June 26, 2018 (hereinafter the "**Action**"), kindly amend the above-identified application as follows:

Amendments to the Claims appear in the Listing of Claims that begins on page 2 of this paper, and

Remarks / Comments begin on page 8 of this paper.

Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for operating an actuator in a controlled device in response to captured human voice data, for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building, the method comprising:

capturing, by a microphone in the client device, the human voice data;

sending to the server, by the client device via the wireless network, the captured human voice data;

receiving, by the server over the Internet, the captured human voice data;

processing, by the server, the captured human voice data;

responsive to the processing, sending a message, by the server to the client over the Internet;

receiving, by the controlled device via the wireless network, the message; and

operating the actuator in the controlled device in response to the received message.

2. (Original) The method according to claim 1, wherein the controlled device is part of, integrated with, or the same as, the client device.

3. (Original) The method according to claim 1, wherein the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person.

4. (Previously Presented) The method according to claim 1, wherein the client device further comprises a sensor that

outputs sensor data that responds to a physical phenomenon, wherein the method further comprising sending to the server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data.

5. (Currently amended) The method according to claim 4, wherein the sensor is a thermoelectric sensor that responds to a temperature or to a temperature gradient of an object using conduction, convection, or radiation, or wherein the sensor is a photoelectric sensor that responds to a visible or an invisible light~~, the invisible light is infrared, ultraviolet, X-rays,~~ or gamma rays, ~~wherein the photoelectric sensor is based on the photoelectric or photovoltaic effect, and a semiconductor component that comprises a photodiode, a phototransistor, or a solar cell, or wherein the photoelectric sensor is based on Charge-Coupled Device (CCD) or a Complementary Metal-Oxide Semiconductor (CMOS) element~~.

6. (Original) The method according to claim 1, wherein the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon.

7. (Original) The method according to claim 6, wherein the physical phenomenon comprises temperature, humidity, pressure, audio, vibration, light, motion, sound, proximity, flow rate, electrical voltage, or electrical current.

8. (Original) The method according to claim 1, wherein the client device comprises multiple microphones, and wherein the capturing comprises capturing, by the multiple microphones in the client device, the human voice data.

9. (Original) The method according to claim 8, wherein the multiple microphones are arranged as a directional microphones array operative to estimate a number, magnitude, frequency,

Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array.

10. (Previously Presented) The method according to claim 1, wherein the microphone is an omnidirectional, unidirectional, or bidirectional microphone that is based on the sensing an incident sound based motion of a diaphragm or a ribbon, or wherein the microphone comprises a condenser, an electret, a dynamic, a ribbon, a carbon, or a piezoelectric microphone.

11. (Currently amended) The method according to claim 1, wherein the client device or the controlled device are addressable in the wireless network or the Internet using ~~distinct locally administered addresses or a universally administered digital addresses~~ an address stored in a volatile or non-volatile memory of the respective device ~~and~~ for uniquely identifying the respective device in the network.

12. (Currently Amended) The method according to claim 11, wherein the digital address is a Media Access Control (MAC) ~~MAC~~ layer address that is MAC-48, EUI-48, or EUI-64 address type or wherein the digital address is a layer 3 address and is static or dynamic IP address that is IPv4 or IPv6 type address.

13. (Currently Amended) The method according to claim 1, wherein the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or Institute of Electrical and Electronics Engineers (IEEE) ~~IEEE~~ 802.15.1-2005

_standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, or Z-Wave™ standards.

14. (Currently Amended) The method according to claim 1, wherein the wireless network is a Wireless Local Area Network ~~LAN~~ (WLAN) that is according to, or base on, IEEE 802.11-2012, IEEE 802.11a, IEEE 802.11b, Institute of Electrical and

Electronics Engineers (IEEE) IEEE 802.11g, IEEE 802.11n, or IEEE 802.11ac.

15. (Original) The method according to claim 1, wherein the wireless network uses a wireless communication over a licensed or an unlicensed radio frequency band, that is an Industrial, Scientific and Medical (ISM) radio band.

16. (Currently Amended) The method according to claim 1, wherein the wireless network is a cellular telephone network that is a Third Generation (3G) network that uses ~~UMTS W-CDMA, UMTS HSPA, UMTS TDD, CDMA2000 1×RTT, CDMA2000 EV-DO, or GSM EDGE-Evolution, and wherein the cellular telephone network is a Fourth Generation (4G) network that uses HSPA+, Mobile WiMAX, LTE, LTE-Advanced, MBWA, or is based on IEEE 802.20-2008.~~ Universal Mobile Telecommunications System (UMTS), Wideband Code Division Multiple Access (W-CDMA) UMTS, High Speed Packet Access (HSPA), UMTS Time-Division Duplexing (TDD), CDMA2000 1xRTT, Evolution – Data Optimized (EV-DO), or Global System for Mobile communications (GSM), Enhanced Data rates for GSM Evolution (EDGE) EDGE-Evolution, or wherein the cellular telephone network is a Fourth Generation (4G) network that uses Evolved High Speed Packet Access (HSPA+), Mobile Worldwide Interoperability for Microwave Access (WiMAX), Long-Term Evolution (LTE), LTE-Advanced, Mobile Broadband Wireless Access (MBWA), or is based on IEEE 802.20-2008.

17. (Previously Presented) The method according to claim 1, wherein the client device or the controlled device is integrated in, is part of, or is entirely included in, an appliance.

18. (Original) The method according to claim 17, wherein the primary functionality of the appliance is associated with food storage, handling, or preparation.

19. (Original) The method according to claim 18, wherein the primary function of the appliance is heating food, and wherein the appliance is a microwave oven, an electric mixer, a stove, an oven, or an induction cooker.

20. (Original) The method according to claim 18, wherein the appliance is a refrigerator, a freezer, a food processor, a dishwashers, a food blender, a beverage maker, a coffeemaker, or an iced-tea maker.

21. (Currently Amended) The method according to claim 17, wherein the primary function of the appliance is associated with environmental control, and the appliance is part of an Heating, Ventilation and Air Conditioning (HVAC) ~~HVAC~~ system.

22. (Original) The method according to claim 21, wherein the primary function of the appliance is associated with temperature control, and wherein the appliance is an air conditioner or a heater.

23. (Currently Amended) The method according to claim 17, wherein the primary function of the appliance is associated with cleaning, wherein the appliance primary function is associated with clothes cleaning and the appliance is a washing machine ~~or a clothes dryer~~, or wherein the appliance is a vacuum cleaner.

24. (Currently Amended) The method according to claim 17, wherein the appliance is an answering machine, a telephone set, a home cinema system, a High Fidelity (HiFi) ~~HiFi~~ system, a Compact Disc (CD) ~~CD~~ or Digital Video Disc (DVD) ~~DVD~~ player, an electric furnace, a trash compactor, a smoke detector, a light fixture, or a dehumidifier.

25. (Original) The method according to claim 1, wherein the actuator is an electric light source for converting electrical energy into light that emits visible or non-visible light for

illumination or indication, and the non-visible light is infrared, ultraviolet, X-rays, or gamma rays.

26. (Previously Presented) The method according to claim 25, wherein the electric light source comprises a lamp, an incandescent lamp, a gas discharge lamp, a fluorescent lamp, a Solid-State Lighting (SSL), a Light Emitting Diode (LED), an Organic LED (OLED), a polymer LED (PLED), or a laser diode.

27. (Original) The method according to claim 1, wherein the actuator is a motion actuator that causes linear or rotary motion.

28. (Original) The method according to claim 1, wherein the actuator is a sounder for converting an electrical energy to omnidirectional, unidirectional, or bidirectional pattern emitted, audible or inaudible, sound waves.

29. (Currently amended) The method according to claim 28, wherein the sounder comprises an electromagnetic loudspeaker, a piezoelectric speaker, an electrostatic loudspeaker (ESL), a ribbon or planar magnetic loudspeaker, or a bending wave loudspeaker, or wherein the sounder comprises an electric bell, a buzzer ~~(or beeper)~~, a chime, a whistle, or a ringer.

30. (Original) The method according to claim 28, wherein the operating of the actuator comprises playing digital audio content that is pre-recorded or synthesized, or wherein the operating of the actuator comprises simulating the voice of a human being or generating music, or wherein the operating of the actuator comprises sounding a syllable, a word, a phrase, a sentence, a short story, or a long story, using male or female voice.

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REMARKS / COMMENTS

The examiner's action dated June 26, 2018 ("Action"), has been received and its contents carefully noted. The rejections are traversed for reasons to be presented below.

Claim Objections.

Section 5: Claims 12, 13, 14, 16, and 21 are amended to overcome the objection in section 5 of the Action.
Section 6: The Applicant disagrees with the objection. The claim is amended to simplify it. However, there is no rule, and the Action does not point to any such rule, that prevents alternative and different elements in a claim.
Section 7: Without agreeing to the objection, for the furtherance of the proceedings, the claim is amended to overcome the objection in section 7 of the Action.
Section 8: Claim 13 is amended to overcome the objection in section 8 of the Action.
Section 9: Claim 23 is amended to overcome the objection in section 9 of the Action.

Office Action, sections 10-41 pages 3-13

Claims 1-30 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite to failing to particularly point out and distinctly claim the subject matter.

NOTE 1: MPEP 2173.04: "Breadth of a claim is not to be equated with indefiniteness ..."

NOTE 2: Recitation of a complete device, however, is not required to satisfy 35 U.S.C. § 112, second paragraph. See In re Hyatt, 708 F.2d 712, 715 (Fed. Cir. 1983) ("[I]f the 'enabling' disclosure of a specification is not commensurate in scope with the subject matter encompassed by a claim, that fact does not render the claim imprecise or indefinite or otherwise not in compliance with the second paragraph of § 112." (quoting In re Borkowski, 422 F.2d 904, 909 (CCPA 1970)); In re Miller, 441 F.2d 689, 693 (CCPA 1971) ("[B]readth is not to be equated with indefmiteness."). Rather, "[a] claim is indefinite when it contains words or phrases whose meaning is unclear." In re Packard, 751 F.3d 1310, 1314 (Fed. Cir. 2014).

It is submitted that the Action has not provided any support WHY the skilled artisan's would not understand what is claimed, and only provides a general and conclusive statement that "… *the terms are "not distinctly defined in the specifications and pointed out in the drawings*". It is respectfully submitted that all claims and terms are clear to an artisan in view of the specifications. For example, the terms "capturing" and "captured" objected in section 11 in the Action, are well known in the art and are exampled and described at least in paragraphs 0042, 0055, 0061, 0163, 0504, and 0520, 0521, and 0524 of the related publication US 2017/0331899.

Further, it is clear from the Action that the scope is understood to the Examiner, and that the Examiner only requires to narrow the claim and limit it, which is NOT standard for compliance with § 112, *second* paragraph. See In re Hammack, 427 F.2d 1378, 1382 (CCPA 1970).]. In particular, the Action has not articulated reasons why a skilled artisan would have difficulty understanding the scope of the claimed subject

matter. Even if there were a lack of descriptive support, which is not, as discussed herein, the absence of descriptive support alone does not necessarily demonstrate indefiniteness. [See *In re Borkowski*, 422 F.2d, 904, 909 (CCPA 1970) and MPEP § 2174.

Further, as admitted in the Action itself, the specification clearly describes all elements in the claim, and provides various examples and embodiments, and it is noted that "*there is no magical relation between the number of representative examples and the breadth of the claims; the number and variety of examples are irrelevant if the disclosure is 'enabling.'*" In re Borkowski, 422 F.2d 904, 910 (CCPA 1970). Further, the Examiner appears to believe that enablement requires the claim to contain all of the information necessary to make and use the claim. It is the **Specification**, however, that must enable the claims. Wright, 999 F.2d at 1561 ("*[T]o be enabling, the specification of a patent must teach those skilled in the art how to make and use the full scope of the claimed invention without 'undue experimentation.'*").

The Answer does not state in any way how the claim wording is not precise or indefinite, hence "*The first sentence of the second paragraph of § 112 is essentially a requirement for precision and definiteness of claim language. If the scope of subject matter embraced by a claim is clear, and if the applicant has not otherwise indicated that he intends the claim to be of a different scope, then the claim does particularly point out and distinctly claim the subject matter which the applicant regards as his invention*". In re Borkowski, 164 USPQ 642, 645-46 (C.C.P.A. 1970).

In one example, in section 11 of the Action, the Action states that "… *detailed explanation with exact examples and diagrams are required for clarification …*.". The claim, in particular when interpreted under BRI, need not any additional

details, and the Action clearly suggest importing limitations to the claim, while "*Though understanding the claim language may be aided by explanations contained in the written description, it is important not to import into a claim limitations that are not part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment*." Superguide Corp. v. DirecTV Enterprises, Inc., 358 F.3d 870, 875, 69 USPQ2d 1865, 1868 (Fed. Cir. 2004). See also Liebel- Flarsheim Co. v. Medrad Inc., 358 F.3d 898, 906, 69 USPQ2d 1801, 1807 (Fed. Cir. 2004).

Office Action, section 42 pages 13-15

Claims 1-30 are rejected under pre-AIA 35 U.S.C. 101 as being directed to a judicial exception.

Argument #1 – 'Machine or Apparatus'

In part a(i) of section 42 involving "STEP 1 Analysis", the claims are characterized as "… *directed to a method related with the router, sensor(s), actuator(s) and devices(s)* …", hence admitted in the Action to be directed to an apparatus. Under Bilski's MoT test, a claimed process can be patent-eligible under § 101 if: (1) **it is tied to a particular machine or apparatus;** or (2) the process transforms a particular article into a different state or thing." (See Bilski, 545 F.3d at 954 (citing Gottschalk v. Benson, 409 U.S. 63, 70 (1972)).

Argument #2 – No support for "routine and conventional functionalities".

In STEP 2B Analysis (section 42 (iii)(1)), the Action states that based on the BACKGROUND, the claims are directed to

routine and conventional functionalities. The Federal Circuit drew a distinction between what is well-understood, routine, conventional, and what is simply known in the prior art, cautioning that the mere fact that something is disclosed in a piece of prior art does not mean it was a well-understood, routine, conventional activity or element. See Berkheimer v. HP Inc., 881 F.3d 1369 (Fed. Cir. 2018). Further, as set forth in MPEP § 2106.05(d)(I), an examiner should conclude that an element (or combination of elements) represents well-understood, routine, conventional activity **only when the examiner can readily conclude that the element(s) is widely prevalent or in common use in the relevant industry.** See MPEP § 2106.05. As the Federal Circuit explained: "*[w]hether a particular technology is well-understood, routine, and conventional goes beyond what was simply known in the prior art. The mere fact that something is disclosed in a piece of prior art, for example, does not mean it was well-understood, routine, and conventional*." Berkheimer, 881 F.3d at 1369.

Further, while the specifications may have shown that some claim elements are known, the specifications does not state, and the Answer does not show, that any single element, or any combination thereof, is well-understood, routine, and conventional. "*The mere fact that something is disclosed in a piece of prior art, for example, does not mean it was well-understood, routine, and conventional*." [*Berkheimer,* 881 F.3d at 1369].

Argument #3 – The rejection improperly based on that "… nor improve the functioning of a computer itself"

As admitted in part a(i) of section 42 involving "STEP 1 Analysis", the claims are characterized as "… *directed to a method related with the router, sensor(s), actuator(s) and*

devices(s) …", hence the claims are directed to multiple computers, connected to multiple sensors / actuators, such as forming a control system, and thus clearly distinct from a single computer functionality as stated in the rejection.

Further, there is no '*collecting information*' – The invention is clearly directed to generating information by a microphone, and not merely collecting existing information, and as such not an 'Abstract Idea' according to the courts.

Argument #4 – The claims improve another technology or technical field

In the rejection of claim 1 under §103, the Action admits on page 17 that that the claimed invention provides "… *implementing the process to adjust one or more devices using the speech patterns, accents and natural language processing*", and further on page 18 that the claimed invention provides "… *an internet-connected control server that communicates with home network to monitor the conditions via sensors and sends the control command over the wireless internet to the control device when an abnormality occurs*". **Hence, the Action itself admits to various improvements in various technologies and fields.**

Argument #5 – The claims recites various elements that provide 'significantly more'.

It is submitted that the claims recites various features and elements that are 'significantly more'. Just as an example, generating a physical motion (claim 27) is clearly a non-abstract significant feature.

Office Action, section 43 pages 16-26

Claims 1-30 are rejected under pre-AIA 35 U.S.C. 103 as being unpatentable over Beliles *et al.* (US 2007/0283005 – hereinafter "Beliles"), in view of Buck *et al.* (US 2009/0089065 – hereinafter "Buck"), and in view of Abe (US 2012/0253480 – hereinafter "Abe").

General.

The rejection is vague and unclear since it provides no more than copied passages from the references. It is not clear how claimed elements or features are equated to elements or features in the references. It is requested that unless allowed, the next Action will be a non-final one and will clearly indicate what element in the references is equated to the recited ones.

The Office Action merely appended a citation to the end of each paragraph of the claims with no reasoning or association with the claimed features. As such, Applicant cannot reasonably determine which "element" of the claim is believed to correspond with which section, figure or feature cited in the rejection. In other words, Applicant is not put on notice as to the rationale behind the rejection and cannot adequately determine whether such basis is proper.

Regarding Beliles – Non-analogous reference.

a. The primary reference upon which the Action is based in the Beliles reference. It is respectfully submitted that the Beliles reference is not in analogous field, and affectively teaches away from the claimed invention.

b. The Beliles reference is based upon for the recited limitations of "*A method … for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building, …*". First,

this passage explicitly recites a wireless network. The Beliles reference focuses on a wired network, and the disclosure in general, and the cited paragraphs 0009, 0015-0017 in particular, are silent regarding any wireless networking.

c. The claimed invention recites, inter alia, an Internet-connected server that is **external to the building**, for processing the received microphone (sensor) data and in response controlling an actuator. First, the Beliles reference in general, and the cited paragraphs in particular, are silent regarding any device communicating over a wireless network to an 'Internet-connected server', and in particular any communication with any device external to the building. Second, the Beliles invention dictates that decisions to activate any actuator are based on a policy table 400 (see FIGs. 2 and 4) that is part of a network device **in the building.**

d. The claimed invention recites operating an actuator in response to capturing human voice, hence referring to **intentional and deliberate actuator control by a human.** In contrast, the Beliles invention focuses on security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and **for detecting unwanted problems or disasters** such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037).

Combining Beliles and Buck.

a. The Appellant submits that the Beliles and Buck references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Action does not explain, as required by the rules, what is the reasoning behind the combining of the

Beliles and Buck references, and why these references are analogous to each other. Further, it is noted that the Action does not explain if and why the Buck reference is analogous and may be combined to the Beliles reference as required by the MPEP. **If the Action is based on the reference being in the same field, it is hereby requested that the definition of the field of both the Beliles and Buck references will be included in the next Action.**

Further, the rejection is conclusory and insufficient to provide any *prima facie* burden for a rejection. Further, Section 2143.01 of the MPEP states: "*The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness.*". Hence, the stated rationale cannot be considered as "objective evidence of non-obviousness" and fails to show "… **objective reason** to combine the teachings of the references."[MPEP 2143.01 (IV)](Emphasis added), and further by using facts gleaned from the claim or the specification, the Action fails to show a conclusion that is reached "… *on the basis of the facts* ***gleaned from the prior art.***" [MPEP 2142](Emphasis added). Further, MPEP § 2145(X)(A)states that "*Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and* ***does not include knowledge gleaned only from applicant's disclosure,*** *such a reconstruction is proper, quoting In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971), (Emphasis added).*"

b. The rationale for combining is stated on bottom of page 17 as: "… *for the purpose of implementing the process to adjust one or more devices using the speech patterns, accents and natural language processing*". This rationale is different from

the rationale stated in the former Action, hence the rationale is improperly treated as a 'moving target' as required for the rejection.

First, the primary reference that is modified by the Action is the Beliles reference. **However, the Beliles is directed to automatic and human-free environment using various environmental sensors. Hence Beliles teaches away from any human intervention in general, and human voice capturing or processing in particular.**

Further, it is respectfully submitted that the modification proposed by the examiner, and the reasoning for the modification, are the SAME in the Action, i.e.: It is trivial and inherent that ALWAYS adding ANY feature X to Beliles may be justified as "… *to combine* ***feature X*** *to … for the purpose of implementing the techniques for novel and modified apparatus having* ***feature X.***".

Hence, this rationale amounts to nothing more than an unsupported and unexplained conclusory statement, while the Office cannot rely solely on common knowledge or common sense to support its findings. Further, it is settled that the Office should provide a "satisfactory explanation" for the motivation for a finding that includes an express and **"rational" connection with the evidence presented.** Furthermore, MPEP 2143 clearly states that "*Any rationale employed must provide* ***a link between the factual findings and the legal conclusion of obviousness.***" (Emphasis added).

c. The Beliles and Buck references are non-analogous at least because the Beliles reference discloses a system **in a building** and the Buck reference discloses a system **in a vehicle.** Further, the Beliles reference teaches security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and

for detecting unwanted problems or disasters such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037), **in a stationary environment in a building.** In contrast, the Buck reference teaches away from these features by teaching **'hands free'** (paragraph 0005) operation in a **moving vehicle.**

The above is further supported by the fact that Beliles is classified under U.S. Class 709/224 relating to 'ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MULTICOMPUTER DATA TRANSFERRING - COMPUTER NETWORK MANAGING' dealing with computer network management, while Buck is classified in Class/Subclass 704/275 associated with "DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION - Speech assisted network", relating to signal processing. Handling computer networks is clearly distinct from any speech processing. It is noted that MPEP §808.02(A) explicitly recites that ***different classes "… shows that each invention has attained recognition in the art as a separate subject for inventive effort, and also a separate field of search."*** (Emphasis added).

Combining Beliles and Abe.

a. First, it is not clear from the long cited passage WHAT elements of Abe are being combined to WHAT elements of Beliles. In particular, it is not clear what elements are equated to control server and to router in both the Beliles and Abe references, and how and where the Abe reference discloses that the recited limitation.

b. The rejection on pages 17-18 is clearly based on BOTH Figure 2 / paragraphs 0050-0051 AND Figures 15-16 / paragraphs 0100-0106 of the Abe reference. These passages are clearly indicated

as two distinct and different embodiments. For example, the title before paragraph 0093 is clearly marked as "3. Control System According to **Second Embodiment**" (Emphasis added). Hence, the rejection seems to improperly 'pick, choose, and combine' between the different embodiments, and as such may not be combined as part of the rejection. As stated in MPEP 2141.02, "… *the examiner may not pick and choose elements from several references to support an obviousness determination*". *Further:*

> *When a prior art reference discloses multiple, distinct embodiments, combining teachings from those distinct embodiments requires an obviousness analysis, including a demonstration of why one of ordinary skill would be motivated to combine those disparate teachings." Symantec, at 20 (citing In re Arkley, 455 F.2d 586, 587-88 (CCPA 1972); Net MoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359, 1371 (Fed. Cir. 2008)).*

c. The Action states that the reference are combined for controlling and monitoring '*when an abnormality occurs*'. First, the rationale does not explain WHY handling such abnormality handling requires the '*implementing an internet-connected control apparatus that can communicate with a remote home network to monitor … and sends the control command to the controlled device …*". It is noted that the conventional wisdom in the art lead to LOCAL handling of the abnormality, to avoid reliance external device and communication networks.

d. The motivation of the combining seems to base on controlling and monitoring '*when an abnormality occurs*'. However, the Beliles reference ALREADY describes such handling, such as handling fire, and the Action provides no explanation of why one of ordinary skill in the art would have modified accordingly the Beliles reference. It is noted that In Square, Inc. v. Cooper, IPR2014-00158, Paper No. 8, at 30 (15 May 2014), an obviousness challenge was dismissed where the primary

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reference already had the capabilities that the secondary reference provided with its added disclosures. Moreover, it would not be appropriate to base this rejection on a combination of these references because the devices in Beliles and Abe are each self-contained and independently operate effectively to implement handling of 'abnormality':

> Because each device independently operates effectively, a person having ordinary skill in the art, who was merely seeking to create a better device to drain fluids from a wound, would have no reason to combine the features of both devices into a single device.

Kinetic Concepts v. Smith and Nephew, 688 F.3d 1342, at 1369 (CAFC, 2012).

e. In an Action of a parent application, the Examiner states that "*The* ***novelty, uniqueness and improvement*** *by combining Abe with Beliles is that now its control logic enables the analysis and use of multiple input-values from a plurality of sensors together with the threshold value(s) before generating the actuator control commands.*" (Emphasis added). Hence, it is admitted in the Answer that **the combination is novel and unique, thus non-obvious.**

Claims 18-24, 26-30

These claims are rejected since they do "… *not teach or further define over the limitation*" of the claim they depend from.

The Applicant disagrees. All these claims clearly teach new limitations or defines former mentioned limitations. It is noted that according MPEP § 2143.03 "*All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). And that "Examiners must consider all claim limitations when determining patentability of an invention over the prior art. In re Gulack, 703 F.2d 1381,*

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1385, 217 USPQ 401, 403-04 (Fed. Cir. 1983). The subject matter of a properly construed claim is defined by the terms that limit the scope of the claim when given their broadest reasonable interpretation. See MPEP § 2111 et seq. It is this subject matter that must be examined. The determination of whether particular language is a limitation in a claim depends on the specific facts of the case. See, e.g., Griffin v. Bertina, 285 F.3d 1029, 1034, 62 USPQ2d 1431 (Fed. Cir. 2002).".

The absence of a reply to a specific rejection, issue, or comment, does not signify agreement with that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims that have not been expressed.

Nothing in this reply should be understood as conceding any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claims does not necessarily signify concession of unpatentability to the claim before its amendment. It should further be understood that any filing of a terminal disclaimer to obviate a rejection based on nonstatutory double patenting is not an admission of the propriety of the rejection.

If the above arguments should not now place the application in the condition for allowance, the examiner is invited to call undersigned counsel to resolve any remaining issues.

Respectfully submitted,

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Electronic Acknowledgement Receipt

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Application Number:	15657163
International Application Number:	
Confirmation Number:	1088
Title of Invention:	SYSTEM AND METHOD FOR SERVER-BASED CONTROL
First Named Inventor/Applicant Name:	Yehuda BINDER
Customer Number:	131926
Filer:	Yehuda Binder
Filer Authorized By:	
Attorney Docket Number:	BINDER-014-US3
Receipt Date:	10-JUL-2018
Filing Date:	23-JUL-2017
Time Stamp:	16:01:38
Application Type:	Utility under 35 USC 111(a)

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Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		7-2018-Non-Final-OA-Response.pdf	341231 90ce78d85bb2e9348062127d2c9bca7f806c6cfe	yes	22

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	7
	Applicant Arguments/Remarks Made in an Amendment	8	22
Warnings:			
Information:			
	Total Files Size (in bytes):	341231	

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.
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UNITED STATES PATENT AND TRADEMARK OFFICE

USPTO Automated Interview Request (AIR)

Jul 10 2018

This paper requesting to schedule and/or conduct an interview is appropriate because:

This submission is requested to be accepted as an authorization for this interview to communicate via the internet. Recognizing that Internet communications are not secure, I hereby authorize the USPTO to communicate with the undersigned concerning scheduling of the interview via video conference, instant messaging, or electronic mail, and to conduct the interview in accordance with office practice including video conferencing.

Name(s):
Yehuda Binder

S-signature:
/Yehuda Binder/

Registration Number:
73612

U.S. Application Number:
15657163

Confirmation Number:
1088

E-mail Address:
yehuda@maypatents.com

Phone Number:
6173325539

Proposed Time of Interview:
7-17-2018 10:00 AM ET

Alternative Proposed Time(s) of Interview:
7-17-2018 11:00 AM ET
Alternative Proposed Time(s) of Interview:
7-18-2018 10:00 AM ET
Prefered Interview Type:
Telephonic

I am the applicant or applicant's representative for this application.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/657,163	07/23/2017	Yehuda BINDER	BINDER-014-US3	1088

131926 7590 06/26/2018

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EXAMINER	
KHAN, HASSAN ABDUR-RAHMAN	

ART UNIT	PAPER NUMBER
2456	

MAIL DATE	DELIVERY MODE
06/26/2018	PAPER

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

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 15/657,163	Applicant(s) BINDER ET AL.	
	Examiner HASSAN KHAN	Art Unit 2456	AIA (First Inventor to File) Status No

-- 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* MONTHS 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 *3/08/2018*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

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

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ 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*

5)☒ Claim(s) *1-30* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-30* is/are rejected.

8)☒ Claim(s) *5,11-14,16,21,23 and 24* is/are objected to.

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

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

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

11)☐ 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).

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).

Certified copies:

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)).

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

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *05/29/2018*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

2. Claims 1- 30 are pending.

Response to the Appeal Brief Filed

3. The applicant's arguments and ground(s) of rejection set forth in the Office action dated 03/08/2018, from which the appeal brief is filed, have been reconsidered. The Office reopens the prosecution with new grounds of rejection.

Information Disclosure Statement

4. The eight (8) information disclosure statements (IDS) submitted on 07/23/2017 (5), 08/17/2017, 11/29/2017 and 05/29/2018 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements has not being considered by the examiner. It is impractical for the examiner to review the references thoroughly with the number of references cited in the case. By initialing each of the cited references on the accompanying 1449 forms, the examiner is merely acknowledging the submission of the cited references and merely indicating that only a cursory review is made of the cited references. Please identify the top 10-20 references that is the most relevant art, with pinpoint specific citations for review.

An applicant's duty of disclosure of material and information is not satisfied by presenting a patent examiner with "a mountain of largely irrelevant [material] from which he is presumed to have been able, with his expertise and with adequate time, to have found the critical [material]. It ignores the real world conditions under which examiners work." Rohm & Haas Co. v. Crystal Chemical Co., 722 F.2d 1556, 1573 [220 USPQ 289] (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) (Emphasis in original). Patent applicant has a duty not just to (disclose pertinent prior art references but to make a disclosure in such way as not to "bury" it within other disclosures of less relevant prior art; See Golden Valley Microwave

Foods Inc. v. Weaver Popcorn Co. Inc., 24 USPQ2d 1801 (N.D Ind. 1992); Molins PLC v. Textron Inc., 26 USPQ2d 1889, at 1899 (D.Del. 1992); Penn Yan Boats, Inc. v. Sea Lark Boats, Inc. et al., 175 USPQ 260, at 272 (S.D. Fl- 1972).

Claim Objections

5. The claims 12, 13, 14, 16, 21 and 24 are objected to because of the following informalities: The claims contains several terms that are an acronym and not defined in full. Appropriate correction is required.

6. The claim 5 is objected to because it comprises of distinct types of sensors, not related to each other and belong to different embodiments with unique functionalities. The claim 5 contains *thermoelectric sensor* and then also the *light sensor*. Appropriate correction is required.

7. The claim 11 is objected to because it comprises of distinct types of addresses, not related to each other and belong to different embodiments with unique functionalities. The claim 11 contains *locally administered addresses* or *universally administered addresses*. Appropriate correction is required.

8. The claim 13 is objected to because of the following informalities: No space between IEEE 802.15.1-2005 and the word *standards*. Appropriate correction is required.

9. The claim 23 is objected to because it comprises of a list of cleaning appliances including *clothes dryer* which is not directly related to the clothes cleaning category. Appropriate correction is required

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. **Claims 1 – 30** are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 1 uses the phrase *controlled device* and *client device* interchangeably, however these terms, their relationship

and their functionality with respect to each other is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use is unclear and confusing. Detailed explanation with exact examples and diagrams are required for clarification. Correction is required.

11. **Claims 1 – 30** are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 1 uses the phrase *capturing* and *captured,* however these terms, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use is unclear and confusing. Detailed explanation with exact examples and diagrams are required for clarification if *capturing* or *captured* involves any storage element or memory etc. Correction is required.

12. **Claims 1 – 30** are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 1 uses the phrase *operating the actuator,* however this term, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use is unclear and confusing. Detailed explanation with exact examples and diagrams are required for clarification if *operating* means a standard actuator response or some form of *remote-controlled* actuator. Also, Claim 1 uses the phrase *server,* however this term is not distinctly defined in the specifications and not pointed out in the drawings and therefore the use is unclear and confusing. Detailed explanation with exact examples and diagrams are required for clarification if *server* means a hardware computer machine or if it means a virtual storage system or if it means some form of a virtual application processor etc. Correction is required.

13. **Claim 2** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 2 uses the phrase *the controlled device is part of, integrated with, or the same as the client device,* however these three different scenarios are not distinctly defined in the specifications and are not pointed out in the drawings. It is unclear how the controlled device can be a part of, integrated with or same as the client device, what

are the examples of such arrangements, and their distinct features, and therefore the use is unclear and confusing. Detailed explanation with exact examples are required for clarification. Correction is required.

14. **Claim 3** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 3 uses the phrase *voice recognition algorithm,* however this term, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use and working of *voice recognition algorithm* is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

15. **Claim 4 and 5** are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claims 4 and 5 uses the phrase *sensor data,* however this term, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use and working of *sensor data* is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

16. **Claim 5** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 5 notes that the *thermoelectric sensor* works on *conduction, convection* or *radiation* and the *photoelectric sensor* works on the *photoelectric* or *photovoltaic effect,* however the working of such a *thermoelectric* sensor that can detect or respond to *temperature* or *temperature gradient* using ALL of these methods, as well as the working of such *photoelectric sensor* that can detect or respond using ALL of these methods, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use and working of such *thermoelectric sensor* or *photoelectric sensor* is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

17. **Claim 6** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 6 uses the phrase

affecting, changing, producing or creating a physical phenomenon, however this phrase, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use and working of *affecting, changing, producing or creating* is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

18. **Claim 6** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 6 uses the phrase *directly or indirectly,* however this phrase, is not distinctly defined in the specifications and not pointed out in the drawings, and therefore the use and working of *directly or indirectly* is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

19. **Claim 7** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 7 uses several examples of physical phenomenon, including *audio, sound* and *flow rate,* however the difference between the *audio* and *sound,* and the examples of *flow rate* (e.g. water flow or data flow or vehicle traffic flow etc.), are not distinctly defined in the specifications and not pointed out in the drawings, and therefore their use and working is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

20. **Claim 9** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 9 uses several examples of *microphones array operatives* such as *estimate a number of a phenomenon,* however the details are not distinctly defined in the specifications and not pointed out in the drawings for different operatives regarding every phenomenon, and therefore their use and working is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

21. **Claim 10** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor

or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 10 uses several examples of microphones such as *omnidirectional* or *bidirectional,* however details are not distinctly defined in the specifications and not pointed out in the drawings for different operatives regarding such microphones and therefore their use and working is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

22. **Claim 10** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 10 uses several examples of microphones such as *condenser, electret, dynamic, ribbon, carbon, piezoelectric* etc., however the details are not distinctly defined in the specifications and not pointed out in the drawings for different operatives regarding every phenomenon, and therefore their use and working is unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

23. **Claim 12** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 12 notes that the *digital address* is a MAC address, and then it also notes that the *digital address* is a layer 3 address, which is not distinctly defined in the specifications and unclear and confusing. Detailed explanation with exact examples and diagrams are required. Correction is required.

24. **Claim 13** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 13 lists several of the wireless network technologies, however it is unclear how these wireless networks are communicating over the Internet, and the detailed functionality is not distinctly defined in the specifications and unclear and confusing. Explanation with exact examples and diagrams are required. Correction is required.

25. **Claim 14** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 14 lists several of the local

wireless network technologies, however it is unclear how these wireless networks are communicating over the Internet, and the detailed functionality is not distinctly defined in the specifications and unclear and confusing. Explanation with exact examples and diagrams are required. Correction is required.

26. **Claim 15** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 15 uses the phrase *wireless network uses a wireless communication*, however it appears to be grammatically incorrect, and it is unclear how this ISM radio band is used with the sensors, actuators and the server since the detailed functionality is not distinctly defined in the specifications and unclear and confusing. The Office would consider Bluetooth as an example since it uses the ISM frequency. Further, details are required on the licensed and unlicensed bands and how they work on the Internet. Explanation with exact examples and diagrams are required. Correction is required.

27. **Claim 16** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 16 uses several kind of cellular telephone wireless networks, each of which requires a unique and different set of hardware/software settings, however no technical details have been provided as to how ALL of them are supported here, and the absence of detailed functionality makes it unclear and confusing. Explanation with exact examples and diagrams are required. Correction is required.

28. **Claim 17** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 17 notes that the client device or controlled device is *integrated in, is part of, or is entirely included in an appliance,* however these three different scenarios are not distinctly defined in the specifications and are not pointed out in the drawings. Also, it is unclear how the controlled device can be a part of, integrated with or same as the client device (as defined in Claim 2), and then how the controlled device and client device can be a part of, integrated within or entirely included in an appliance (as here in Claim 17). In the absence of the

examples of such arrangements, and their distinct features, the use is unclear and confusing. Further, the said appliance is left open-ended and as per the claim, ANY appliance can be considered here (e.g. lawn mower, juicer, stove, refrigerator, can opener, dishwasher, air-conditioner etc.). Therefore, the Applicant is REQUIRED to provide detailed and exhaustive list of all *appliances* with exact examples for clarification. Correction is required.

29. **Claim 18** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 18 uses the term *primary functionality* of the appliance, but DOES NOT provide a complete and detail list of ALL the functionalities of the appliance. Correction is required. Further, the said appliance is claimed to be associated with *food storage, handling, or preparation*, ALL of which are unique and different categories and need to be specifically defined in the specifications, without which the claim is unclear and confusing. As per the claim, ANYTHING related to *food storage, handling or preparation* can be considered an appliance (e.g. a spoon, a fork, coffee cup, cotton candy machine, baby feeder, milk bottle, peanut butter jar, stove, toaster, refrigerator, dishwasher, soap dispenser, kitchen sink etc.). Therefore, the Applicant is REQUIRED to provide DETAILED and EXHAUSTIVE LIST of said *appliances* with exact examples for clarification. These appliances MUST be related and somewhat interchangeable for a person skill in the art (e.g. a stove and an oven). Correction is required.

30. **Claim 19** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 19 uses the phrase *primary function of the appliance is heating food*, but then it includes *electric mixer* which is not known to heat the food. Hence, the claim DOES NOT provide a complete and detail list of ALL the functionalities of the appliance. Also, all the said appliances in the claim have distinct functionalities, however no technical details have been provided as to how ALL of them are supported here, and the absence of detailed functionality makes it unclear and confusing. Explanation with exact examples and diagrams are required. Correction is required.

31. **Claim 20** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 20 includes a list of appliances, where all the said appliances in the claim have distinct functionalities, however no technical details have been provided as to how ALL of them are supported here, and the absence of detailed functionality makes it unclear and confusing. Further the list of appliances in Claims 19 and Claim 20 are categorically different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required. Correction is required.

32. **Claim 21** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 21 states *HVAC System* but does not further define the components or details about this system. Also, Claim 21 includes a category of appliances (i.e. environmental control) with distinct functionalities, however, the list of appliances in Claims 18, 19, 20 and Claim 21 are categorically all different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

33. **Claim 22** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 22 includes a category of appliances (i.e. temperature control) with distinct functionalities, however, the list of appliances in Claims 18, 19, 20, 21 and Claim 22 are categorically all different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

34. **Claim 23** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 23 uses the phrase *primary*

function of the appliance is associated with cleaning and then it also uses the phrase *primary function is associated with clothes cleaning,* hence it is confusing and unclear as to what is the primary function of the appliance. Also, the claim includes *clothes dryer* which is not known for cleaning. Hence, the claim DOES NOT provide a complete and detail list of ALL the functionalities of the said appliance. Claim 23 includes a category of appliances (i.e. cleaning) with distinct functionalities, however, the list of appliances in Claims 18, 19, 20, 21, 22 and Claim 23 are categorically all different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

35. **Claim 24** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 24 includes a plurality of appliances bundled together without any rationale since each of which belongs to a separate category of appliances (i.e. communications, media player, lighting etc.) with distinct functionalities. The list of appliances in Claims 18, 19, 20, 21, 22, 23 and Claim 24 are categorically all different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

36. **Claim 25** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 25 includes an actuator that emits light using electrical energy, however the various type of light (e.g. x-rays, gamma rays, infrared) requires specialized hardware, and are categorically all different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required about this actuator that can fulfill EACH of these claimed limitations, and the applicant MUST address as to in what aspect or functionality, all of these various kind of lights have been considered by the applicant to be in the same invention. Correction is required.

37. **Claim 26** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 26 includes a plurality of electric light sources bundled together without any rationale since each of which belongs to a separate category of light source (i.e. OLED, Incandescent Lamp etc.) and are all different and not interchangeable. Therefore, detailed explanation with exact examples and diagrams are required about this electric light source that can fulfill EACH of these claimed limitations, and the applicant MUST address as to in what aspect or functionality, all of these various kind of light sources have been considered by the applicant to be in the same invention. Correction is required.

38. **Claim 27** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 27 includes an actuator that produces a linear/rotary motion, however the details are missing and making it unclear and confusing as to how the actuator is producing these motions, it is a command activated electrical powered actuator, or it is a tension spring-based actuator, or something else. Also, the said linear and rotary motions are two distinct functionalities, and are not interchangeable. No technical details have been provided as to how EACH of them are supported here, and the absence of detailed functionality makes it unclear and confusing. Explanation with exact examples and diagrams are required. Correction is required.

39. **Claim 28** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 28 includes an actuator that produces sound with various patterns, however the details are missing and making it unclear and confusing as to how the actuator is producing these sounds waves. The list of actuators in Claims 6, 7, 27 and 28 includes *actuator* that are categorically all different and not interchangeable. No technical details have been provided as to how EACH of them are supported here. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

40. **Claim 29** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 29 includes a list of sounder elements that generate sounds (e.g. a loudspeaker or a whistle etc.), however the list of sounders includes elements that are categorically all different and not interchangeable. No technical details have been provided as to how EACH of them are supported here. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

41. **Claim 30** is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 30 includes a list of responses by the actuator however the list of responses includes elements that are categorically all different and not interchangeable. No technical details have been provided as to how EACH of them are supported here. Therefore, detailed explanation with exact examples and diagrams are required as to in what aspect or functionality they have been considered by the applicant to be in the same invention. Correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

42. **Claims 1 - 30** are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

a. **Following the 2014 Interim Eligibility Guidance:**

i. **STEP 1 Analysis:** The claims are directed to a method related with the router, sensor(s), actuator(s) and devices(s) in a building or in a vehicle, and are therefore a statutory **(Step 1: YES)**.

ii. **STEP 2A Analysis:** The claim(s) recite(s) the steps to the assembly and working of a method using various components for use in a building, including a microphone to capture the human voice, sending the data to an internet-connected server, processing the voice data, generating and sending a message to an internet connected controlled device to operate an actuator in response to the received message, all which is an abstract idea similar to the concepts that have been identified as abstract by the courts, such as [*collecting information, analyzing it, and displaying certain results of the collection and analysis, Electric Power Group*]. Therefore, the claim(s) is/are directed to an abstract idea **(Step 2A: YES)**

iii. **STEP 2B Analysis:**

(1) The claim(s) recite(s) the additional element(s)/limitation(s) of *commanding an actuator in response to a received message associated with the captured human voice data, a server connected over the internet to receive, process and transmit the human voice data and related messages, and an actuator in the controlled device,* which when taken individually amounts to routine and conventional functionalities. The Applicant demonstrated prior art in (Fig. 1 and ¶0033), where the sensors and home devices are communicating via external servers over internal and external networks, and sending and receiving voice and audio data packet messages (¶0034-¶0036). The applicant also discussed Z-Wave, a wireless communications protocol designed for home automation, specifically for remote control applications in residential and light commercial environments, by sending and receiving control commands over the network (¶0017-¶0018). Hence, from reviewing the presented sections from the BACKGROUND section of the applicants' specifications, it is well understood that

the claims are directed to routine and conventional functionalities, and when taken individually, the additional element(s) of the claim(s) does not provide significantly more to the abstract idea claimed.

(2) The combination of all elements as a whole are no more than the sum of their parts, and provides nothing more than [a method for operating actuator in a controlled device by capturing human voice, processing the voice data and transmitting the command messages over the internet]. The claim(s) does not improve another technology or technical field; nor improve the functioning of a computer itself, nor is the invention implemented using a particular machine. For these reasons, the claim(s) is/are ineligible **(Step 2B: No)**

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 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 negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims the examiner presumes that the subject matter of the various claims was commonly owned as of the effective filing date of the claimed invention(s) absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and effective filing dates of each claim that was not commonly owned as of the effective filing date of the later invention in order for the examiner to consider the applicability of 35 U.S.C. 102(b)(2)(C) for any potential 35 U.S.C. 102(a)(2) prior art against the later invention.

43. Claims 1 - 30 are rejected under 35 U.S.C. 103 as being unpatentable over US Patent Application Publication No. 2007/0283005 to Beliles et al. (hereinafter Beliles), in view of US Patent Application Publication No. 2009/0089065 to Buck et al. (hereinafter Buck) and in view of US Patent Application Publication No. 2012/0253480 to Abe.

Regarding Claim 1, Beliles discloses (in ¶0004) a method and system for dynamically responding to non-network events at a network device in a computer network that further includes:

a method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising; Beliles discloses (in ¶0015, ¶0016 and ¶0034) a building such as a server room with installed network-attached sensors, that transmits the data over a network such as the Internet (i.e. external network), to destination devices such as a monitoring system or a control room (i.e. control server) using network devices such as routers in case of the non-network events (e.g. fires, floods, unauthorized physical access etc.).

Beliles does not explicitly disclose capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data, operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data. However, in an analogous art, Buck teaches:

capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data; Buck teaches

capturing human voice data using the microphones (in ¶0031) and then transmitting to external devices using a wireless network (¶0050).

operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data; Buck teaches that (¶0028) one or more tangible or wireless vehicle buses 408 (that may interface a wireless service provider) may convey the control signals and/or actuator signals to one or more local or remote (e.g., out-of-vehicle) destinations (i.e. and external server connected over the internet). Buck teaches that (¶0032) a speech recognition processor or software may recognize the command which may initiate a recording, (e.g., by opening or generating one or more data files that are retained in a local or remote memory). The speech recognition and control process may interface a physical or a wireless bus system that interfaces in-vehicle and/or out-vehicle devices and networks. Buck teaches that spoken words are converted into recognizable commands and in response the actuator may perform an action (in ¶0028). The devices may provide electronic and/or mechanical adjustments (e.g., through actuators, servo-motors, sensor thresholds, visual/aural setting, etc.) that may be used to adjust mechanical and/or electronic elements and devices.

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising, as disclosed by Beliles, and capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data, operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data, as taught by Buck, for the purpose of implementing the process to adjusts one or more devices using the speech patterns, accents and natural language processing (Buck, ¶0018).

Beliles in view of Buck does not explicitly disclose processing, by the server, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled

device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message. However, in an analogous art, Abe teaches:

processing, by the server, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message; Abe teaches (in Fig. 15) a control apparatus is connected to a plurality of networks through the internet and includes a sensor information acquisition section, a sensor information accumulation section, a control command determination section, a control rule accumulation section, a communication section and a device control section. The control command determination section determines the control command on the basis of the sensor information and the control rules (i.e. control logic), and accordingly the device control section controls each of the devices by outputting the control command determined in the control command determination section to the devices to be controlled (¶0050 and ¶0051).

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine the method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising, and capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data, operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data, as disclosed by Beliles in view of Buck, and processing, by the server, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message, as taught by Abe, for the purpose of implementing an internet-connected control server that communicates with home network to monitor the conditions via sensors and sends the control command over the wireless internet to the controlled device when an abnormality occurs (Abe, Figs. 15 and 16, ¶0104 and ¶0105).

Regarding Claim 2, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the controlled device is part of, integrated with, or the same as, the client device; Buck teaches (in ¶0020) that the controlled device (i.e. seating system, electronic entertainment, mirror controls or navigation device etc.) are part of the client device (i.e. vehicle or vehicle related system).

Regarding Claim 3, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person; Buck teaches (in ¶0037 and ¶0038) that to recognize a spoken word, the process may compute a most likely sequence of states through the Hidden Markov Models (HMM). This process may be performed through a Viterbi algorithm, which may iteratively determine the most likely path through the associated trellis. Individual voice characteristics of a speaker (user) may be stored locally or remotely in a central location (e.g., in a relational database that may be structured as the database described above) to identify speakers.

Regarding Claim 4, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Beliles discloses:

wherein the client device further comprises a sensor that outputs sensor data that responds to a physical phenomenon, wherein the method further comprising sending to the server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data; Beliles discloses (in Fig. 6 and ¶0052) one or more sensors automatically detects one or more non-network events (i.e. sensor data that responds to a physical phenomenon), and notifications of the non-network events are then transmitted over the network to one or more destination network devices. Beliles discloses (in ¶0054) that in response to the received notifications, the network device generates a response (i.e. a message) such as an instruction by the

network device to one or more network-attached physical control devices to modify one or more physical parameters based on the applied policy.

Regarding Claim 5, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 4. Further, Beliles discloses:

wherein the sensor is a thermoelectric sensor that responds to a temperature or to a temperature gradient of an object using conduction, convection, or radiation, wherein the sensor is a photoelectric sensor that responds to a visible or an invisible light, the invisible light is infrared, ultraviolet, X-rays, or gamma rays, wherein the photoelectric sensor is based on the photoelectric or photovoltaic effect, and comprises a semiconductor component that comprises a photodiode, a phototransistor, or a solar cell, or wherein the photoelectric sensor is based on Charge-Coupled Device (CCD) or a Complementary Metal-Oxide Semiconductor (CMOS) element; Beliles discloses (in ¶0028) that one or more sensors, such as motion sensor 121, smoke sensor 122, fire sensor 123, or other network-attached sensors (e.g. thermoelectric sensor, moisture sensors, etc.) may be attached to the network through one or more network-attached sensor translators 131 and 132, or may be directly attached to the network (e.g., a sensor 124 with integrated translator) themselves.

Regarding Claim 6, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon; Buck teaches (in ¶0032) that the speech recognition and control process may interface a physical or a wireless bus system that interfaces in-vehicle and/or out-vehicle devices and networks. The devices may provide electronic and/or mechanical adjustments (e.g., through actuators, servo-motors, sensor thresholds, visual/aural setting, etc.) that may be used to adjust mechanical (i.e. physical) and/or electronic elements and devices.

Regarding Claim 7, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the physical phenomenon comprises temperature, humidity, pressure, audio, vibration, light, motion, sound, proximity, flow rate, electrical voltage, or electrical current; Buck teaches (in ¶0028) the phrase may actuate one or more operations such as the position of one or more seats, one or more mirrors, or communicate or program one or more powertrain, chassis, climate, entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc.). In other processes, the operation may tune a pass band of a bandwidth filter (e.g., select an audio channel), adjust a volume level, a treble setting, a bass setting, a balance control, and/or other aural settings.

Regarding Claim 8, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the client device comprises multiple microphones, and wherein the capturing comprises capturing, by the multiple microphones in the client device, the human voice data; Buck teaches (in ¶0031) some systems interface one or more microphones or a microphone array that includes two or more directional microphones (e.g., multiple directional microphones).

Regarding Claim 9, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 8. Further, Buck discloses:

wherein the multiple microphones are arranged as a directional microphones array operative to estimate a number, magnitude, frequency, Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array; Buck teaches (in ¶0031) some systems interface one or more microphones or a microphone array that includes two or more directional microphones (e.g., multiple directional microphones).

Regarding Claim 10, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the microphone is an omnidirectional, unidirectional, or bidirectional microphone that is based on the sensing an incident sound based motion of a diaphragm or a ribbon, or wherein the microphone comprises a condenser, an electret, a dynamic, a ribbon, a carbon, or a piezoelectric microphone; the multiple microphones are arranged as a directional microphones array operative to estimate a number, magnitude, frequency, Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array; Buck teaches (in ¶0031) that to convert sound into analog signals or digital signals, some systems interface one or more microphones or a microphone array that includes two or more directional microphones (e.g., multiple directional microphones).

Regarding Claim 11, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Beliles discloses:

wherein the client device or the controlled device are addressable in the wireless network or the Internet using distinct locally administered addresses or a universally administered digital addresses stored in a volatile or non-volatile memory of the respective device and uniquely identifying the respective device in the network; Beliles teaches (in ¶0035 - ¶0039) that the network device send a notification using the TCP/IP data packets, and the message includes one or more headers 310 (e.g., IP/ATM headers, etc.), and a data field 320. Source address 312 and destination address 314 within the header 310 are the network addresses for the sending device (e.g., sensor translators) and the receiving device (e.g., a monitor/control system 140), respectively. Further, the memory 240 comprises a plurality of storage locations that are addressable by the processor 220 and the network interfaces 210 for storing software programs and data structures associated with the present invention (¶0032).

Regarding Claim 12, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Beliles discloses:

wherein the digital address is a MAC layer address that is MAC-48, EUI-48, or EUI-64 address type or wherein the digital address is a layer 3 address and is static or dynamic IP address that is IPv4 or IPv6 type address; Beliles teaches (in ¶0035 - ¶0039) that the network device send a notification using the TCP/IP data packets, and the message includes one or more headers (e.g., IP/ATM headers, etc.), and a data field. Source address and destination address within the header are the network addresses (i.e. MAC layer addresses and/or IP addresses) for the sending device (e.g., sensor translators) and the receiving device (e.g., a monitor/control system), respectively.

Regarding Claim 13, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, orZ-Wave™ standards; Buck teaches (in ¶0052) that the speech recognition controller may be compliant with a Wi-Fi protocols or multiple protocols or subsets (e.g., ZigBee, High Speed Packet Access (e.g., High Speed Downlink Packet Access and/or High Speed Uplink Packet Access), Bluetooth, Mobile-Fi, Ultrawideband, Wi-Fi, WiMax, mobile WiMax, cellular, satellite, etc.

Regarding Claim 14, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Beliles discloses:

wherein the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, orZ-Wave™ standards; Beliles teaches (in Fig. 1 and ¶0027) a schematic block diagram of an exemplary computer network 100 comprising a plurality of devices interconnected to a network cloud 110, such as, e.g., a wide area network (WAN), local area network (LAN), etc.

Regarding Claim 15, does not teach or further define over the limitation in claim 13 respectively. Therefore claim 15 is rejected for the same rationale of rejection as set forth in claim 13.

Regarding Claim 16, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the wireless network is a cellular telephone network, that is a Third Generation (3G) network that uses UMTS W-CDMA, UMTS HSPA, UMTS TDD, CDMA2000 lxRTT, CDMA2000 EV-DO, or GSM EDGE-Evolution, and wherein the cellular telephone network is a Fourth Generation (4G) network that uses HSPA+, Mobile WiMAX, LTE, LTE-Advanced, MBWA, or is based on IEEE 802.20-2008; Buck teaches (in ¶0052) a cellular or wireless protocol, a wireless or cellular telephone, a radio, a satellite, or other wireless communication system may link the speech recognition controller 404 transceivers 414 to a privately accessible or publicly accessible distributed network. The system may be complaint with WiMax or IEEE 802.16a or may have a frequency band within a range of about 2 to about 11 GHz, a range of about 31 miles, and a data transfer rate of about 70 Mbps. In other applications, the speech recognition controller may be compliant with a Wi-Fi protocols or multiple protocols or subsets (e.g., ZigBee, High Speed Packet Access (e.g., High Speed Downlink Packet Access and/or High Speed Uplink Packet Access), Bluetooth, Mobile-Fi, Ultrawideband, Wi-Fi, WiMax, mobile WiMax, cellular, satellite, etc., referred to as the transceiver protocols) that may be automatically detected and selected and may enable this automatic access through one or more communication nodes.

Regarding Claim 17, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Abe discloses:

wherein the client device or the controlled device is integrated in, is part of, or is entirely included in, an appliance; Abe teaches (in ¶0034) a control apparatus that acquires sensor information and determines a control command to control a plurality of home appliances (e.g. refrigerator, stove, oven, microwave, dishwasher, washing machine, television etc.) such as an air conditioner.

Regarding Claim 18, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Abe discloses:

wherein the client device or the controlled device is integrated in, is part of, or is entirely included in, an appliance; Abe teaches (in ¶0036) a control apparatus that acquires sensor information and determines a control command to control a plurality of home appliances, such as an air conditioner.

Regarding Claim 19, does not teach or further define over the limitation in claim 17 respectively. Therefore claim 19 is rejected for the same rationale of rejection as set forth in claim 17.

Regarding Claim 20, does not teach or further define over the limitation in claim 17 respectively. Therefore claim 20 is rejected for the same rationale of rejection as set forth in claim 17.

Regarding Claim 21, does not teach or further define over the limitation in claim 17 respectively. Therefore claim 21 is rejected for the same rationale of rejection as set forth in claim 17.

Regarding Claim 22, does not teach or further define over the limitation in claim 17 respectively. Therefore claim 22 is rejected for the same rationale of rejection as set forth in claim 17.

Regarding Claim 23, does not teach or further define over the limitation in claim 17 respectively. Therefore claim 23 is rejected for the same rationale of rejection as set forth in claim 17.

Regarding Claim 24, does not teach or further define over the limitation in claim 17 respectively. Therefore claim 24 is rejected for the same rationale of rejection as set forth in claim 17.

Regarding Claim 25, the combination of Beliles, Buck and Abe discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the actuator is an electric light source for converting electrical energy into light that emits visible or non-visible light for illumination or indication, and the non-visible light is infrared, ultraviolet, X-rays, or gamma rays; Buck teaches (¶0032) that the devices may provide electronic and/or mechanical adjustments (e.g., through actuators, servo-motors, sensor thresholds, visual/aural setting, etc.) that may be used to adjust mechanical and/or electronic elements and devices (e.g. controlling the headlights, cabin lights or the fog-lights, controlling the audio speakers and volume, controlling the digital media player, controlling the windows up/down function).

Regarding Claim 26, does not teach or further define over the limitation in claim 25 respectively. Therefore claim 26 is rejected for the same rationale of rejection as set forth in claim 25.

Regarding Claim 27, does not teach or further define over the limitation in claim 25 respectively. Therefore claim 27 is rejected for the same rationale of rejection as set forth in claim 25.

Regarding Claim 28, does not teach or further define over the limitation in claim 25 respectively. Therefore claim 28 is rejected for the same rationale of rejection as set forth in claim 25.

Regarding Claim 29, does not teach or further define over the limitation in claim 25 respectively. Therefore claim 29 is rejected for the same rationale of rejection as set forth in claim 25.

Regarding Claim 30, does not teach or further define over the limitation in claim 25 respectively. Therefore claim 30 is rejected for the same rationale of rejection as set forth in claim 25.

Response to Arguments

Claim Rejections - 35 USC § 103

44. Applicant's arguments in the Appeal Brief filed on 03/08/2018 with respect to Claims 1 – 30 have

been fully considered and the 35 USC § 103 rejection is maintained. Examiner notes that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Argument #2: Claims are patent eligible under § 101: In response to applicant argument, *"the analysis in the Action is silent regarding the limitations, and fails to show why these limitations are not patent eligible,"* the Office maintains the rejection under § 101 and after conducting another search, updated the ground(s) of rejection, since the claim(s) recite(s) the steps to the assembly and working of a method using various components for use in a building, including a microphone to capture the human voice, sending the data to an internet-connected server, processing the voice data, generating and sending a message to an internet connected controlled device to operate an actuator in response to the received message, all which is an abstract idea similar to the concepts that have been identified as abstract by the courts, such as [*collecting information, analyzing it, and displaying certain results of the collection and analysis, Electric Power Group*]. Therefore, the claim(s) is/are directed to an abstract idea. The additional element(s)/limitation(s) of the claims when taken individually amounts to routine and conventional functionalities. The Applicant demonstrated prior art in (Fig. 1 and ¶0033), where the sensors and home devices are communicating via external servers over internal and external networks, and sending and receiving voice and audio data packet messages (¶0034-¶0036). The applicant also discussed Z-Wave, a wireless communications protocol designed for home automation, specifically for remote control applications in residential and light commercial environments, by sending and receiving control commands over the network (¶0017-¶0018). Hence, from reviewing the presented sections from the BACKGROUND section of the applicants' specifications, it is well understood that the claims are directed to routine and conventional functionalities, and when taken individually, the additional element(s) of the claim(s) does not provide significantly more to the abstract idea claimed. The claim(s) does not improve another technology or technical field; nor improve the functioning of a computer itself, nor is the

invention implemented using a particular machine. A change of one electronic device to a plurality of electronic devices, and a change of one connected network to a plurality of connected networks is not an improvement in the existing technology. For these reasons, the claims are ineligible.

Arguments #1, #3 – #20: In response to applicant arguments, the Office notes that an updated search has been conducted and a new reference (Abe, 2016/0062330) is combined with the previous references, and the combination of Beliles, Buck and Abe now clearly and explicitly teaches all the limitations of 1 - 30. Hence, in the light of new reference and an updated search, the applicant's arguments regarding the previous 103 rejection (Argument #3 - Argument #20) are now considered moot.

Conclusion

45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HASSAN KHAN whose telephone number is (313) 446-6574 and fax number is (571) 483-7559. The examiner can normally be reached on MONDAY - THURSDAY. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Philip Chea can be reached on (571) 272-3951. 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.

/HASSAN A KHAN/
Examiner, Art Unit 2456
/PHILIP CHEA/
Supervisory Patent Examiner, Art Unit 2456

Notice of References Cited	Application/Control No. 15/657,163	Applicant(s)/Patent Under Reexamination BINDER ET AL.	
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U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2007/0283005 A1	12-2007	Beliles; Robert P.	H04L41/0816	709/224
*	B	US-2008/0307075 A1	12-2008	Urano; Takehiro	G06F1/14	709/220
*	C	US-2009/0089065 A1	04-2009	Buck; Markus	B60R16/0373	704/275
*	D	US-2010/0071053 A1	03-2010	Ansari; Amir	G06Q30/04	726/12
*	E	US-2013/0091279 A1	04-2013	Haddad; Wassim	H04L12/2834	709/225
*	F	US-2016/0062330 A1	03-2016	Abe; Yuuichi	G08C17/02	700/12
*	G	US-2017/0272316 A1	09-2017	Johnson; Michael W.	G06Q10/103	1/1
	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	CPC Classification
	N					
	O					
	P					
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	S					
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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.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	12	(US-20160062330-$ or US-20090198380-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20080307075-$ or US-20090089065-$ or US-20170272316-$).did.	US-PGPUB	OR	OFF	2018/06/18 06:55
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L3	0	1 and (voice or audio)	USPAT	OR	ON	2018/06/18 06:55
L4	0	L1 and (voice or audio)	USPAT	OR	OFF	2018/06/18 06:55
L5	0	1 and audio	USPAT	OR	OFF	2018/06/18 06:56
L6	0	1 and (voice or audio)	USPAT	OR	OFF	2018/06/18 06:56
L7	9	1 and (voice or audio)	US-PGPUB; USPAT	OR	OFF	2018/06/18 06:56
L8	5	1 and ((voice or audio or speech) with (command or control))	US-PGPUB; USPAT	OR	OFF	2018/06/18 06:58
L9	6	1 and (mic or microphone)	US-PGPUB; USPAT	OR	OFF	2018/06/18 07:02
L10	42	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$ or US-20130308581-$).did. or (US-20110118888-$ or US-20080031139-$ or US-20080068156-$ or US-20080307075-$ or US-20170111158-$ or US-20090224906-$ or US-20090089065-$ or US-20170272316-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	OR	OFF	2018/06/18 07:16

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L13	5	10 and ((voice or audio or speech) NEAR9 (command or control))	US-PGPUB; USPAT	OR	OFF	2018/06/18 07:17
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L15	1	10 and ((speech with control with process) same (external))	US-PGPUB; USPAT	OR	OFF	2018/06/18 07:21
L16	14	10 and ((control with process))	US-PGPUB; USPAT	OR	OFF	2018/06/18 07:21
L17	7	10 and (((speech or voice or audio) with control))	US-PGPUB; USPAT	OR	OFF	2018/06/18 07:22
L18	7	17 and wireless	US-PGPUB; USPAT	OR	OFF	2018/06/18 07:28
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L21	2	"20060212194"	US-PGPUB; USPAT	OR	OFF	2018/06/18 09:53
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L27	1	24 and appliance	US-PGPUB; USPAT	OR	ON	2018/06/18 09:56
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L29	1	"8447843".pn.	US-PGPUB; USPAT	OR	ON	2018/06/18 09:58

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L31	0	30 and appliance	US-PGPUB; USPAT	OR	ON	2018/06/18 09:58
L32	0	30 and kitchen	US-PGPUB; USPAT	OR	ON	2018/06/18 09:59
L33	21	("20030009271" | "20030105389" | "20060111825" | "20070021847" | "20070198144" | "20070283005" | "20080100428" | "20090138136" | "20090198380" | "20090224906" | "20100030421" | "20100071053" | "20100211258" | "20110153149" | "20120079149" | "20130091279" | "20130308581" | "20140215491" | "20150046582" | "20160062330" | "20160344745").PN.	US-PGPUB; USPAT	OR	OFF	2018/06/18 09:59
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L39	1	24 and (appliance or stove or refrigerator)	US-PGPUB; USPAT	OR	OFF	2018/06/18 10:04
L40	0	30 and (appliance or stove or refrigerator)	US-PGPUB; USPAT	OR	OFF	2018/06/18 10:04
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L65	31	(benjamin and maytal).in.	US-PGPUB	ADJ	ON	2018/06/18 12:53
L66	26	(may and patents).as.	US-PGPUB	ADJ	ON	2018/06/18 12:53
L67	39	(may and patents).aanm.	US-PGPUB	ADJ	ON	2018/06/18 12:53
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L74	374	700/28.ccls.	US-PGPUB	ADJ	ON	2018/06/18 12:54
L75	148	700/22.ccls.	US-PGPUB	ADJ	ON	2018/06/18 12:54
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L77	12341	L72 or L73 or L74 or L75 or L76	US-PGPUB	ADJ	ON	2018/06/18 12:54
L78	5776	709/218.ccls.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L79	14669	H04L67/12.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L80	29542	B60K 31/00.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L81	29542	B60K 31/18.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L82	300	B60Y2200/11.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L83	915	B60Y2200/12.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L84	217	B60Y2200/126.cpc.	US-	OR	ON	2018/06/18

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L87	128	B60Y2200/40.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L88	23	B60Y2200/50.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L89	104	B60Y2200/90.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L90	41547	G01C 21/00.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L91	204	G06Q2240/00.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L92	11825	G07C 5/008.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L93	49737	G08G 1/00	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
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L96	55	(may and patents).aanm.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
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L98	44	(maytal and benjamin).in.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
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L102	395	(binder and yehuda).in.	US-PGPUB; USPAT	OR	ON	2018/06/18 12:59
L103	55	(may and patents).aanm.	US-	OR	ON	2018/06/18

			PGPUB; USPAT			12:59
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L107	2	"15657163"	US-PGPUB; USPAT	OR	OFF	2018/06/18 13:02
L108	1	L105 and (human with voice with actuator with client).clm.	US-PGPUB; USPAT	ADJ	ON	2018/06/18 13:02

6/ 18/ 2018 1:03:05 PM
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Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	15657163
Filing Date	2017-07-23
First Named Inventor	Yehuda Binder
Art Unit	2456
Examiner Name	KHAN, HASSAN ABDUR-RAHMAN
Attorney Docket Number	BINDER-014-US3

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20050273505		2005-12-08	Kim, Byeong-Woo	
	2	20060212194		2006-09-21	Breed; David S.	
	3	20070096565		2007-05-03	Breed; David S. ; et al.	
	4	20070176740		2007-08-02	Aubertin; Jean-Pierre ; et al.	
	5	20080129475		2008-06-05	Breed; David S. ; et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	15657163
	Filing Date	2017-07-23
	First Named Inventor	Yehuda Binder
	Art Unit	2456
	Examiner Name	KHAN, HASSAN ABDUR-RAHMAN
	Attorney Docket Number	BINDER-014-US3

	6	20080136670		2008-06-12	Tengler; Steve ; et al.	
	7	20100207754		2010-08-19	Shostak; Oleksandr T. ; et al.	
	8	20130139440		2013-06-06	WECHS; Martin	

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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
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Examiner Initials*	Cite No	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, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
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EXAMINER SIGNATURE

Examiner Signature	/HASSAN A KHAN/	Date Considered	06/14/2018

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

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	15657163
	Filing Date	2017-07-23
	First Named Inventor	Yehuda Binder
	Art Unit	2456
	Examiner Name	KHAN, HASSAN ABDUR-RAHMAN
	Attorney Docket Number	BINDER-014-US3

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	15657163
Filing Date	2017-07-23
First Named Inventor	Yehuda Binder
Art Unit	2456
Examiner Name	KHAN, HASSAN ABDUR-RAHMAN
Attorney Docket Number	BINDER-014-US3

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	2018-05-27
Name/Print	Yehuda Binder	Registration Number	73612

This collection of information is required by 37 CFR 1.97 and 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 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Privacy Act Statement

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The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

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4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15657163	BINDER ET AL.
	Examiner	Art Unit
	HASSAN KHAN	2456

CPC- SEARCHED		
Symbol	Date	Examiner
H04L67/12, B60K 31/00, B60K 31/18, B60Y2200/11, B60Y2200/12, B60Y2200/126, B60Y2200/13, B60Y2200/30, B60Y2200/40, B60Y2200/50, B60Y2200/90, G01C 21/00, G06Q2240/00, G07C 5/008, G08G 1/00 (combined wit	9/29/2017	H.K.
B60K 31/00, B60K 31/18, B60Y2200/11, B60Y2200/12, B60Y2200/126, B60Y2200/13, B60Y2200/30, B60Y2200/40, B60Y2200/50, B60Y2200/90	01/19/2018	H.K.
H04L67/12, G01C 21/00, G06Q2240/00, G07C 5/008, G08G 1/00 (combined with text search)	01/19/2018	H.K.
B60K 31/00, B60K 31/18, B60Y2200/11, B60Y2200/12, B60Y2200/126, B60Y2200/13, B60Y2200/30, B60Y2200/40, B60Y2200/50, B60Y2200/90	6/18/2018	H.K.
H04L67/12, G01C 21/00, G06Q2240/00, G07C 5/008, G08G 1/00 (combined with text search)	6/18/2018	H.K.

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	218 (combined with text search)	9/29/2017	H.K.
709	218 (combined with text search)	01/19/2018	H.K.
709	218 (combined with text search)	6/18/2018	H.K.

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

SEARCH NOTES		
Search Notes	Date	Examiner

/HASSAN KHAN/ Examiner.Art Unit 2456	

SEARCH NOTES		
Search Notes	**Date**	**Examiner**
Assignee search conducted (see EAST search history)	9/29/2017	H.K.
Google Patents search conducted	9/29/2017	H.K.
Inventor search conducted (see EAST search history)	9/29/2017	H.K.
EAST Search History (see attached)	9/29/2017	H.K.
Assignee search conducted (see EAST search history)	01/19/2018	H.K.
Inventor search conducted (see EAST search history)	01/19/2018	H.K.
EAST Search History (see attached)	01/19/2018	H.K.
Assignee search conducted (see EAST search history)	6/18/2018	H.K.
Inventor search conducted (see EAST search history)	6/18/2018	H.K.
EAST Search History (see attached)	6/18/2018	H.K.

INTERFERENCE SEARCH			
US Class/ CPC Symbol	**US Subclass / CPC Group**	**Date**	**Examiner**

/HASSAN KHAN/ Examiner.Art Unit 2456	

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15657163	BINDER ET AL.
	Examiner	Art Unit
	HASSAN KHAN	2456

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

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

CLAIM		DATE								
Final	Original	09/29/2017	01/19/2018	06/18/2018						
	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	✓	✓	✓						

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
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Application Number	15657163
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First Named Inventor	Yehuda Binder
Art Unit	2456
Examiner Name	KHAN, HASSAN ABDUR-RAHMAN
Attorney Docket Number	BINDER-014-US3

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20050273505		2005-12-08	Kim, Byeong-Woo	
	2	20060212194		2006-09-21	Breed; David S.	
	3	20070096565		2007-05-03	Breed; David S. ; et al.	
	4	20070176740		2007-08-02	Aubertin; Jean-Pierre ; et al.	
	5	20080129475		2008-06-05	Breed; David S. ; et al.	

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	Attorney Docket Number	BINDER-014-US3

	6	20080136670		2008-06-12	Tengler; Steve ; et al.	
	7	20100207754		2010-08-19	Shostak; Oleksandr T. ; et al.	
	8	20130139440		2013-06-06	WECHS; Martin	

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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
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NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	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, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1		

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EXAMINER SIGNATURE

Examiner Signature		Date Considered	

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
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	Filing Date	2017-07-23
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Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	2018-05-27
Name/Print	Yehuda Binder	Registration Number	73612

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Electronic Patent Application Fee Transmittal

Application Number:	15657163
Filing Date:	23-Jul-2017
Title of Invention:	SYSTEM AND METHOD FOR SERVER-BASED CONTROL
First Named Inventor/Applicant Name:	Yehuda BINDER
Filer:	Yehuda Binder
Attorney Docket Number:	BINDER-014-US3

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

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:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	2806	1	120	120
		Total in USD ($)		**120**

Electronic Acknowledgement Receipt	
EFS ID:	32739567
Application Number:	15657163
International Application Number:	
Confirmation Number:	1088
Title of Invention:	SYSTEM AND METHOD FOR SERVER-BASED CONTROL
First Named Inventor/Applicant Name:	Yehuda BINDER
Customer Number:	131926
Filer:	Yehuda Binder
Filer Authorized By:	
Attorney Docket Number:	BINDER-014-US3
Receipt Date:	29-MAY-2018
Filing Date:	23-JUL-2017
Time Stamp:	12:00:39
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$120
RAM confirmation Number	052918INTEFSW00013739506726
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	IDS7a.pdf	1035281 96a74a150b80ae4101f7d6913f6b372cdce dbe93	no	5
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	29914 ab1211390a9322b204bbf84fe0c42d124e9 bbac8	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1065195		

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEALS BOARD (PTAB)

ATTY.'S DOCKET: BINDER-014-US3

In re Application of:	)	Confirmation No. 1088
	)	
Yehuda BINDER	)	Art Unit: 2456
	)	
Appln. No.: 15/657,163	)	Examiner: Khan, Hassan Abdu
	)	
Filed: July 23, 2017	)	Washington, D.C.
	)	
For: SYSTEM AND METHOD FOR SERVER BASED CONTROL	)	March 8, 2018
	)	

Mail Stop Appeal Brief - Patents
Honorable Commissioner for Patents
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Honorable Commissioner:

APPEAL BRIEF

Appellant submit this Appeal Brief to the PATENT TRIAL AND APPEALS BOARD (PTAB) on appeal from the decision of the Examiner of Group Art Unit 2456 dated January 25, 2018, finally rejecting all pending claims under 35 U.S.C. 103 (a) [hereinafter 'Action' or 'Final action'].

Real Party of Interest

The real party in interest is May Patents Ltd., the assignee of record.

Related Appeals and Interferences

Appellant assert that no other appeals, interferences or Judicial proceedings are known to the Appellant, the Appellant legal representative that will

directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

Status of Claims

Claims 1-30 are pending in the application, and are attached in Appendix A. The pending claims stand rejected in the Final Action dated January 25, 2018 under 35 U.S.C. §103(a).

Status of Amendments

No amendments have been made to the pending claims in response to the final Office Action dated January 25, 2018.

Summary of Claimed Subject Matter

Claim 1 discloses a method for operating an actuator (such as item 61a, 61b in Figure 6) in a controlled device (item 23a, 23b, or 23c in Figure 2; item 60 in Figure 5; page 117, line 25, to page 118, line 16) in response to captured human voice data, for use with a client device (item 13a, 13b, or 13c in Figure 1; item 23a, 23b, or 23c in Figure 2; item 50 in Figure 5; page 83, lines 4-22) in a building (such as item 189 in Figure 2) communicating over a wireless network (such as numerals 14a, 14b, or 22 in Figure 2 or Figure 24; page 11, line 20, to page 12, line 20; page 76, lines 10-29; page 163, lines 9-22) and an Internet-connected server device (item 24 in Figure 2, item 151 in figure 15; page 76, line 10, to p[age 77, line 8) external to the building. The method comprises capturing (item 171 in Figure 17), by a microphone (such as items 51a, 51b in Figure 5) in the client device, the human voice data; sending to the server, by the client device via the wireless network, the captured human voice data; receiving

(item 192 in Figure 19), by the server over the Internet, the captured human voice data; processing (item 192 in Figure 19), by the server, the captured human voice data; responsive to the processing, sending (item 175 in Figure 19) a message, by the server to the client over the Internet; receiving, by the controlled device via the wireless network, the message; and operating the actuator (page 112, lines 13-25; page 117, line 25, to page 118, line 16) in the controlled device in response to the received message (item 150a in Figure 15a; item 170 in Figure 17; page 20, lines 22-31; page 41, lines 1-17; page 42, line 21, to page 44, line 15; page 162, line 24, to page 163, line 8).

Ground of Rejection to be Reviewed on Appeal

In the Action dated January 25, 2018, claims 1-30 are finally rejected under 35 U.S.C. 103(a).

Argument

Argument #1: Improper rejection format

The Action is vague and unclear since it provides no more than copied passages from the references. It is not clear how claimed elements or features are equated to elements or features in the references. Since the rejection is not made explicit (Examiner did not correlate claimed elements to elements in the prior art with a reference to figures or description), the Appellant cannot reasonably determine which element is believed to correspond to each of the claimed limitations and is forced to guess which features in the cited art the Examiner believed to disclose such claimed features.

It is submitted that "*A rejection must be set forth in sufficiently articulate and informative manner as to meet*

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the notice requirement of § 132, such as by identifying where or how each limitation of the rejected claims is met by the prior art references." [In re Jung, 637 F.3d 1356, 1363 (Fed. Cir. 2011)]; see also 37 C.F.R. § 1.104(c)(2) ("*When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable.*"). Further, the" PTO must create a record that includes "specific fact findings for each contested limitation and satisfactory explanations for such findings."" [Gechter v. Davidson 116 F.3d 1454, 1460 (Fed. Cir. 1997)], and "*It is neither our place, nor Appellants'* burden, to speculate as to the basis for rejecting claims. Furthermore, the Supreme Court in KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 **should be made explicit.**(Emphasis added).

It is thus respectfully requested that if the rejection is affirmed, the application will be remanded for a clearer rejection.

Office Action, section 6 pages 3-5

Claims 1-30 are rejected under pre-AIA 35 U.S.C. 101 as being directed to a judicial exception.

Argument #2: The claims are patent eligible under §101

a. It is respectfully submitted that these claims are not directed to a judicial exception at least because the claim limitations include various tangible and physical activities, that cannot be considered as abstract. It is noted that none of the examples provided in the USPTO guidelines include signal processing (such as processing human voice) and affecting a physical phenomenon based on such analysis.

b. Claim 1 recites, *inter alia*, the limitations of :" … *receiving, by the controlled device via the wireless network, the message; and operating the actuator in the controlled device in response to the received message.*". The analysis in the Action is silent regarding to these limitations, and fails to show why these limitations are not patent eligible. It is submitted that these actions are clearly can not be characterized as "Abstract Idea".

c. The claims is characterized as 'Abstract Idea' since (top of page 4) it is "… *leaving nothing but a storage medium, processor and instructions remaining, which are part of* ***a general purpose computer.***" (Emphasis added). The Actions clearly refers to a SINGLE computer – However, the claim clearly defines THREE different computerized entities (controlled device, client device, and an Internet-connected server) that communicate over TWO networks: wireless network and the Internet. Hence, the Action mis-characterize the claimed invention, which is clearly an improvement rooted in computer networking technology and directed to solving a problem in the hardware / software / control arts.

d. In section 13 of the Action (top of page 25), the Examiner notes that "… *Beliles discloses a method and system for* ***dynamically responding*** *to network events, by* ***collecting monitored data from sensors*** *and* ***detecting network events / notification*** *and then responding accordingly,* ***which is analogous to the teaching of the applicant's specifications.***" (Emphasis added). Hence, it is admitted by the Office that the claimed invention is clearly more than ***'a general purpose computer'***, but also involves 'dynamic responding', 'collecting data from sensors', 'detecting network events', each of which is clearly NOT part of ***'a general purpose computer'***, and further clearly an improvement rooted in computer networking

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technology and directed to solving a problem in the hardware / software / control arts.

e. First, the Action overlook various steps in claim 1 and in the various dependent claims. Second, the Action equates 'capturing the human voice data' to '*obtaining and comparing intangible data*' – A human voice cannot be considered as 'intangible data' and capturing the voice by a microphone cannot be considered as '*obtaining and comparing*' in general, and '*obtaining and comparing intangible data*' in particular. Third, the Action equates 'processing by the server' to '*collecting and comparing known information*' – A human voice cannot be considered as '*known information*', and voice processing cannot be equated to any '*collecting and comparing*' in general, and '*collecting and comparing known information*' in particular. Further, the Action states that the invention relates to '*a storage medium, processor and instructions remaining, which are part of a general purpose computer*'. Such characterization overlooks the claimed structure of three different devices (controlled device, client device, and a server) communicating with each other in a defined way. Such a structure cannot be considered as '*general purpose computer*'.

f. The claims are clearly associated with particular types of devices - apparatus / device / system – hence relating to a tangible matter. By definition, tangible matter cannot be considered as 'abstract'. It is further submitted that according to the guidelines and the examples published in the USPTO guidelines after Alice for determining eligibility, no apparatus claim were found ineligible as 'abstract idea'. Hence, the §101 rejection should not apply, and the claims should be found patent eligible.

g. The Action states (bottom of page 3) that the step of 'capturing the human voice' is an 'Abstract Idea of Itself'

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based on "*(obtaining and comparing intangible data, CyberSource)*". However, while the CyberSource case involved handling business data that is indeed intangible data, the claimed invention involves capturing human voice data, which is clearly **tangible data relating to a physical entity.**

Office Action, section 7 pages 6-23

Claims 1-4, 6-14, 16 and 27-30 are rejected under pre-AIA 35 U.S.C. 103 as being unpatentable over Beliles *et al.* (US 2007/0283005 – hereinafter "Beliles"), in view of Buck *et al.* (US 2009/0089065 – hereinafter "Buck"), and in view of Urano *et al.* (US 2008/0307075 – hereinafter "Urano").

Regarding claim 1

Argument #3: The Beliles reference does not teach the recited features.

The Action relies upon the Beliles reference as a support for the claim 1 preamble stating: "*A method for operating an actuator in a controlled device in response to captured human voice data, for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building, …*", based on paragraphs 0004, 0009, and 0015-0017 of the Beliles reference. It is submitted that these cited paragraphs do not disclose or mention the recited limitations of 'Internet-connected server' and 'wireless network'.

Further, it is respectfully submitted that the Beliles reference is not in analogous field, and affectively teaches away from the claimed invention. The Beliles reference is based upon for the recited limitations of "*A method … for use with a client device in a building communicating over a*

wireless network and an Internet-connected server device external to the building, …". First, while this passage explicitly recites a wireless network, the Beliles reference focuses on a wired network, and the disclosure in general, and the cited paragraphs 0009, 0015-0017 in particular, are silent regarding any wireless networking. Thus, since the rejection is based on , as stated on top of page 8, on Beliles disclosing "… *method for use with client device in a building communicating over a wireless network and an Internet-connected server device external to the building,* … ***as disclosed by Beliles,*** *…",* the rejection cannot be sustained.

Second, the claimed invention recites, inter alia, an Internet-connected server that is **external to the building**, for processing the received microphone (sensor) data and in response controlling an actuator. The Beliles reference in general, and the cited paragraphs in particular, are silent regarding any device communicating over a wireless network to an 'Internet-connected server', and in particular any communication with any device external to the building. Further, the Beliles invention dictates that decisions to activate any actuator are based on a policy table 400 (see FIGs. 2 and 4) that is part of a network device **in the building.**

Argument #4: The Beliles reference teaches away from the claimed invention

The claimed invention recites operating an actuator in response to capturing human voice, hence referring to **intentional and deliberate actuator control by a human.** In contrast, the Beliles invention focuses on security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and

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for detecting unwanted problems or disasters such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037).

Argument #5: Improper combination of the Beliles and Buck references.

a. The Action states in general that these references are in an analogous art. However, the Action fails to explain WHY the Beliles and the Buck references are analogous. In case that the Action suggests that these reference are analogous since they are in the same field, a clear definition of that field is respectfully requested.

b. The Appellant submits that the Beliles and Buck references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Action does not explain, as required by the rules, what is the reasoning behind the combining of the Beliles and Buck references, and why these references are analogous to each other.

Further, the rejection is conclusory and insufficient to provide any *prima facie* burden for a rejection. Further, Section 2143.01 of the MPEP states: "*The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness.*". Hence, the stated rationale cannot be considered as "objective evidence of non-obviousness" and fails to show "… **objective reason** to combine the teachings of the references."[MPEP 2143.01 (IV)](Emphasis added), and further by using facts gleaned from the claim or the specification, the Action fails to show a conclusion that is reached "… *on the basis of the facts* ***gleaned from the prior art.***" [MPEP 2142](Emphasis added).

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Further, MPEP § 2145(X)(A)states that "*Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and* ***does not include knowledge gleaned only from applicant's disclosure,*** *such a reconstruction is proper, quoting In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971), (Emphasis added).*"

c. The Beliles and Buck references are non-analogous at least because the Beliles reference discloses a system **in a building** and the Buck reference discloses a system **in a vehicle.** Further, the Beliles reference teaches security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and **for detecting unwanted problems or disasters** such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037), **in a stationary environment in a building.** In contrast, the Buck reference teaches away from these features by teaching **'hands free'** (paragraph 0005) operation in a **moving vehicle.**

The above is further supported by the fact that Beliles is classified under U.S. Class 709/224 relating to 'ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MULTICOMPUTER DATA TRANSFERRING - COMPUTER NETWORK MANAGING' dealing with computer network management, while Buck is classified in Class/Subclass 704/275 associated with "DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION - Speech assisted network", relating to signal processing. Handling computer networks is clearly distinct from any speech processing. It is noted that MPEP §808.02(A) explicitly

recites that ***different classes*** "… ***shows that each invention has attained recognition in the art as a separate subject for inventive effort, and also a separate field of search***." (Emphasis added). Furthermore, different classes were relied upon in a restriction requirement that was issued by the SAME Examiner in a parent application 13/733,634 dated October 6, 2016.

Further, according to the restriction requirement that was issued by the SAME Examiner in a parent application 13/733,634 dated October 6, 2016, a restriction was required between Invention group I that is drawn to "*a system for commanding an actuator operation in response to a sensor response*" and Invention group V that is drawn to "*vehicle control system*". The restriction requirement itself states on page 2 that these inventions "… **are not obvious variant**" (Emphasis added), hence, **these two features is patentably different**, and thus cannot be combined. Further, MPEP §806.04(h) explicitly recites that "***Species Must Be Patentably Distinct From Each Other***". It is improper to apply a 'double standard' to the legal term of 'not obvious' – one for restriction and one for §103 rejection. Hence, it is admitted by the Office that vehicle control, as stated in the rationale, is non-obvious to be added to other systems.

Argument #6: Improper rationale for combining the Beliles and Buck references.

The rationale for combining the Beliles and Buck references is stated on top of page 9 as: "… *for the purpose of implementing the techniques for adjustment of vehicle elements through speech control*". This rationale amounts to nothing more than an unsupported and unexplained conclusory statement, while the Office cannot rely solely on common

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knowledge or common sense to support its findings. Further, it is settled that the Office should provide a "satisfactory explanation" for the motivation for a finding that includes an express and **"rational" connection with the evidence presented.** Furthermore, MPEP 2143 clearly states that "*Any rationale employed must provide* ***a link between the factual findings and the legal conclusion of obviousness.***" (Emphasis added).

First, the primary reference that is modified by the Action is the Beliles reference. **However, the Beliles reference is NOT disclosing any vehicle or vehicle elements, and is NOT disclosing any speed or speed control, rendering the rationale as moot.**

Further, the Action is based on paragraph 0028 of the Buck reference, which is not related and does not mention any speed in general, and speed control in particular. Furthermore, it is not clear, and technically incorrect, that adding an actuator that is voice controlled results in, or supports, any "*adjustment of vehicle elements through speech control*", as suggested by the stated rationale.

Argument #7: Improper combination of the Beliles and Urano references.

a. The Action states in general that these references are in an analogous art. However, the Action fails to explain WHY the Beliles and the Buck references are analogous. In case that the Action suggests that these reference are analogous since they are in the same field, a clear definition of that field is respectfully requested.

b. The Appellant submits that the Beliles and Buck references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically

be combined. The Action does not explain, as required by the rules, what is the reasoning behind the combining of the Beliles and Buck references, and why these references are analogous to each other.

Further, the rejection is conclusory and insufficient to provide any *prima facie* burden for a rejection. Further, Section 2143.01 of the MPEP states: "*The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness*.". Hence, the stated rationale cannot be considered as "objective evidence of non-obviousness" and fails to show "… **objective reason** to combine the teachings of the references."[MPEP 2143.01 (IV)](Emphasis added), and further by using facts gleaned from the claim or the specification, the Action fails to show a conclusion that is reached "… *on the basis of the facts* ***gleaned from the prior art.***" [MPEP 2142](Emphasis added). Further, MPEP § 2145(X)(A)states that "*Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and* ***does not include knowledge gleaned only from applicant's disclosure,*** *such a reconstruction is proper, quoting In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971), (Emphasis added).*"

c. The Beliles and Urano references are non-analogous at least because the Beliles reference focuses on security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and **for detecting unwanted problems or disasters** such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037), **in a stationary environment in a**

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building. In contrast, the Urano reference in general, and the cited paragraphs 0101-0104 in particular, dictate devices that are **'worn by the respective person', hence portable and human operated.**

Further, according to the restriction requirement that was issued by the SAME Examiner in a parent application 13/733,634 dated October 6, 2016, a restriction was required between Invention group I that is drawn to "*a system for commanding an actuator operation in response to a sensor response*" and Invention group IV that is drawn to "*a control system for commanding an actuator operation in response to processing of voice*". The restriction requirement itself states on page 2 that these inventions "… **are not obvious variant**" (Emphasis added), hence, **these two features is patentably different**, and thus cannot be combined. Further, MPEP §806.04(h) explicitly recites that "***Species Must Be Patentably Distinct From Each Other***". It is improper to apply a 'double standard' to the legal term of 'not obvious' – one for restriction and one for §103 rejection. Hence, it is admitted by the Office that voice-based control, as stated in the rationale, is non-obvious to be added to other systems.

Argument #8: Improper rationale for combining the Beliles and Urano references.

The rationale for combining is stated on top of page 9 as: "… *for improved energy efficiency*". First, the primary reference that is modified by the Action is the Beliles reference. The Urano reference is combined with the Beliles reference for disclosing relating to capturing by a microphone of human voice data and sending the captured human voice data. These features are not relevant to any energy consumption in general, and to any "*improved energy efficiency*" as stated in

the rationale in particular, hence this rationale for combining these references is moot.

Further, the Action is based on paragraphs 0101-0104 of the Urano reference, which is not related and does not mention any powering or energy in general, and "*improved energy efficiency*" in particular. Furthermore, it is not clear, and technically incorrect, that adding components, such as microphone and sending captured voice to a server results in, or supports in any way, any "*improved energy efficiency*", as suggested by the stated rationale.

Hence, this rationale amounts to nothing more than an unsupported and unexplained conclusory statement, while the Office cannot rely solely on common knowledge or common sense to support its findings. Further, it is settled that the Office should provide a "satisfactory explanation" for the motivation for a finding that includes an express and **"rational" connection with the evidence presented.** Furthermore, MPEP 2143 clearly states that "*Any rationale employed must provide* ***a link between the factual findings and the legal conclusion of obviousness.***" (Emphasis added).

Regarding claim 2

Argument #9: No rationale provided for combining with Beliles

Claim 2 recites the limitation of "… *the controlled device is part of, integrated with, or the same as, the client device*.". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

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Regarding claim 3

Argument #10: No rationale provided for combining with Beliles

Claim 3 recites the limitation of "… *the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 4

Argument #11: No rationale provided for combining with Beliles

Claim 4 recites the limitations of "*a sensor that outputs sensor data that responds to a physical phenomenon*" and "*sending to the server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 6

Argument #12: No rationale provided for combining with Beliles

Claim 6 recites the limitations of "… *the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon.*". However, no rationale is

provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 8

Argument #13: No rationale provided for combining with Beliles

Claim 8 recites the limitations of "… *the client device comprises multiple microphones*" and "… *the capturing comprises capturing, by the multiple microphones in the client device, the human voice data.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Furthermore, the limitation of "… *the capturing comprises capturing, by the multiple microphones in the client device, the human voice data.*" further defines the limitation of "… capturing, by a microphone in the client device, the human voice data …". As stated on page 8, the Action **relies upon the Urano reference** for this limitation, hence it is improper **to rely on the Buck reference** for the narrowing limitation in this claim.

Regarding claim 9

Argument #14: Improper characterization.

The applicant disagrees that this claim '… *does not teach or further define over the limitation in claim 8*' as stated in the rejection. Claim 9 recites that "… *the multiple microphones are arranged as a directional microphones array*

operative to estimate a number, magnitude, frequency, Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array.”. Such usage of the multiple microphones is technically non-obvious and patentable.

It is submitted that this limitation is not found in the applied references, and are patentable distinctions over the prior art. Further, it is noted that according to MPEP: “*All Claim Limitations Must Be Considered*” (MPEP 2143.03), and that “*All words in a claim must be considered in judging the patentability of that claim against the prior art.*” In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494,496 (CCPA 1970).

Regarding claim 13

Argument #15: No rationale provided for combining with Beliles

Claim 13 recites the limitations of “… *the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005 standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, or Z-Wave™ standards.*”. However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. In particular, it is not clear why the wireless network relied upon of the Beliles reference is a WPAN one. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 16

Argument #16: No rationale provided for combining with Beliles

Claim 16 recites the limitations of "… *the wireless network is a cellular telephone network that is a Third Generation (3G) network that uses UMTS W-CDMA, UMTS HSPA, UMTS TDD, CDMA2000 1xRTT, CDMA2000 EV-DO, or GSM EDGE-Evolution, and wherein the cellular telephone network is a Fourth Generation (4G) network that uses HSPA+, Mobile WiMAX, LTE, LTE-Advanced, MBWA, or is based on IEEE 802.20-2008.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. In particular, it is not clear why the wireless network relied upon of the Beliles reference is a cellular one. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 28

Argument #17: No rationale provided for combining with Beliles

Claim 28 recites the limitations of "… *the actuator is a sounder for converting an electrical energy to omnidirectional, unidirectional, or bidirectional pattern emitted, audible or inaudible, sound waves.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. In particular, the rationale for combining the Beliles and Buck references is stated on top of page 9 as: "… *for the purpose of implementing the techniques for adjustment of vehicle elements through speech control*", and a sounding by a sounder cannot be considered as '*adjustment of vehicle elements*'.

Office Action, section 8 pages 15-17

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Claims 5 and 15 are rejected under pre-AIA 35 U.S.C. 103 as being unpatentable over Beliles *et al.* (US 2007/0283005 – hereinafter "Beliles"), in view of Buck *et al.* (US 2009/0089065 – hereinafter "Buck"), in view of Urano *et al.* (US 2008/0307075 – hereinafter "Urano"), and further in view of Gelvin *et al.* (US 2015/0046582 – hereinafter "Gelvin").

Regarding claims 5, 15

Argument #18: Improper combination of the Beliles and Urano references.

a. The Action does not state Why the Beliles and the Buck references are combines, or WHY they are in an analogous art, as required by the rules. In case that the Action suggests that these reference are analogous since they are in the same field, a clear definition of that field is respectfully requested.

b. The Appellant submits that the Beliles and Gelvin references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Action does not explain, as required by the rules, what is the reasoning behind the combining of the Beliles and Gelvin references, and why these references are analogous to each other.

Further, the rejection is conclusory and insufficient to provide any *prima facie* burden for a rejection. Further, Section 2143.01 of the MPEP states: "*The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness.*". Hence, the stated rationale cannot be considered as "objective evidence of non-obviousness" and fails to show "… **objective reason** to

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combine the teachings of the references."[MPEP 2143.01 (IV)](Emphasis added), and further by using facts gleaned from the claim or the specification, the Action fails to show a conclusion that is reached "… *on the basis of the facts* ***gleaned from the prior art.***" [MPEP 2142](Emphasis added). Further, MPEP § 2145(X)(A)states that "*Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and* ***does not include knowledge gleaned only from applicant's disclosure,*** *such a reconstruction is proper, quoting In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971), (Emphasis added).*"

c. The Beliles and Gelvin references are non-analogous art involving two different fields. The Beliles reference, as admitted by the Action itself, is in the field of computer networks in a building environment (see e.g., paragraphs 0004-0006). In contrast, the Gelvin reference is directed to a vehicular environment. According to a restriction requirement in this application dated October 6, 2016, on page 2, invention group V '*drawn to a vehicular control system*' is a different invention that is '***not obvious variant***'(Emphasis added) of the other inventions, such as invention group I pertaining to claim 1. Hence, **these two features is patentably different**, and thus cannot be combined. Further, MPEP §806.04(h) explicitly recites that "***Species Must Be Patentably Distinct From Each Other***". Furthermore, the restriction requirement in this application dated October 6, 2016, on page 10, defined the subject matter of claims 104-108 as different species BG.

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Argument #19: Improper rationale for combining the Beliles and Abe references

The rationale for combining is stated on page 17 as: "… *for the purpose of implementing a distributed network and Internet access to sensors, controls, and processors* …". However, in the rejection of claim 1 in page 6 of the Action, the Action states that the Beliles reference discloses "*A method for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building,* …". Hence according to Action itself, this rationale for combining is already found in the Beliles reference, thus there is no motivation for such combining, and since the Office admits that the primary reference (Beliles) already had the capabilities that the secondary reference (Gelvin) provided with its added disclosures, no obviousness may be sustained. (*In Square, Inc. v. Cooper, IPR2014-00158, Paper No. 8, at 30 (15 May 2014)*). Further, it is not be appropriate to base this rejection on a combination of these references because the systems in Beliles and Gelvin are each self-contained and independently operate effectively:

> *Because each device independently operates effectively, a person having ordinary skill in the art, who was merely seeking to create a better device to drain fluids from a wound, would have no reason to combine the features of both devices into a single device.*

Kinetic Concepts v. Smith and Nephew, 688 F.3d 1342, at 1369 (CAFC, 2012).

Further, claim 5 further defines various sensors, such as a thermoelectric sensor or a photoelectric sensor. The stated rationale for combining is not relevant to these limitations: The type of sensors is not relevant to any 'implementation of a distributed network'.

Regarding claim 15

Argument #20: No rationale provided for combining with Beliles

Claim 15 recites the limitations of "… *the wireless network uses a wireless communication over a licensed or an unlicensed radio frequency band, that is an Industrial, Scientific and Medical (ISM) radio band.*". However, no rationale is provided in the Action for combining these features, even if taught by the Gelvin reference, to the Beliles reference. In particular, it is not clear why the wireless network relied upon of the Beliles reference is according to the claim. The rationale stated for claim 5 is not relevant to this claim, and relates to combination of other non-relevant elements.

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Conclusion

In conclusion, the rejection of claims 1-30 under 35 U.S.C. 103(a) should be cancelled, resulting allowance of the all pending claims. Attached hereto is an Appendix containing a copy of the claims involved in this appeal.

Respectfully submitted,

By /Yehuda Binder/
Yehuda Binder
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Appendix A – Pending claims

1. A method for operating an actuator in a controlled device in response to captured human voice data, for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building, the method comprising:

capturing, by a microphone in the client device, the human voice data;

sending to the server, by the client device via the wireless network, the captured human voice data;

receiving, by the server over the Internet, the captured human voice data;

processing, by the server, the captured human voice data;

responsive to the processing, sending a message, by the server to the client over the Internet;

receiving, by the controlled device via the wireless network, the message; and

operating the actuator in the controlled device in response to the received message.

2. The method according to claim 1, wherein the controlled device is part of, integrated with, or the same as, the client device.

3. The method according to claim 1, wherein the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person.

4. The method according to claim 1, wherein the client device further comprises a sensor that outputs sensor data that responds to a physical phenomenon, wherein the method further comprising sending to the server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data.

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5. The method according to claim 4, wherein the sensor is a thermoelectric sensor that responds to a temperature or to a temperature gradient of an object using conduction, convection, or radiation, wherein the sensor is a photoelectric sensor that responds to a visible or an invisible light, the invisible light is infrared, ultraviolet, X-rays, or gamma rays, wherein the photoelectric sensor is based on the photoelectric or photovoltaic effect, and comprises a semiconductor component that comprises a photodiode, a phototransistor, or a solar cell, or wherein the photoelectric sensor is based on Charge-Coupled Device (CCD) or a Complementary Metal-Oxide Semiconductor (CMOS) element.

6. The method according to claim 1, wherein the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon.

7. The method according to claim 6, wherein the physical phenomenon comprises temperature, humidity, pressure, audio, vibration, light, motion, sound, proximity, flow rate, electrical voltage, or electrical current.

8. The method according to claim 1, wherein the client device comprises multiple microphones, and wherein the capturing comprises capturing, by the multiple microphones in the client device, the human voice data.

9. The method according to claim 8, wherein the multiple microphones are arranged as a directional microphones array operative to estimate a number, magnitude, frequency, Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array.

10. The method according to claim 1, wherein the microphone is an omnidirectional, unidirectional, or bidirectional microphone that is based on the sensing an incident sound based motion of a diaphragm or a ribbon, or wherein the

microphone comprises a condenser, an electret, a dynamic, a ribbon, a carbon, or a piezoelectric microphone.

11. The method according to claim 1, wherein the client device or the controlled device are addressable in the wireless network or the Internet using distinct locally administered addresses or a universally administered digital addresses stored in a volatile or non-volatile memory of the respective device and uniquely identifying the respective device in the network.

12. The method according to claim 11, wherein the digital address is a MAC layer address that is MAC-48, EUI-48, or EUI-64 address type or wherein the digital address is a layer 3 address and is static or dynamic IP address that is IPv4 or IPv6 type address.

13. The method according to claim 1, wherein the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005 standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, or Z-Wave™ standards.

14. The method according to claim 1, wherein the wireless network is a Wireless LAN (WLAN) that is according to, or base on, IEEE 802.11-2012, IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, or IEEE 802.11ac.

15. The method according to claim 1, wherein the wireless network uses a wireless communication over a licensed or an unlicensed radio frequency band, that is an Industrial, Scientific and Medical (ISM) radio band.

16. The method according to claim 1, wherein the wireless network is a cellular telephone network that is a Third Generation (3G) network that uses UMTS W-CDMA, UMTS HSPA, UMTS TDD, CDMA2000 1xRTT, CDMA2000 EV-DO, or GSM EDGE-Evolution,

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and wherein the cellular telephone network is a Fourth Generation (4G) network that uses HSPA+, Mobile WiMAX, LTE, LTE-Advanced, MBWA, or is based on IEEE 802.20-2008.

17. The method according to claim 1, wherein the client device or the controlled device is integrated in, is part of, or is entirely included in, an appliance.

18. The method according to claim 17, wherein the primary functionality of the appliance is associated with food storage, handling, or preparation.

19. The method according to claim 18, wherein the primary function of the appliance is heating food, and wherein the appliance is a microwave oven, an electric mixer, a stove, an oven, or an induction cooker.

20. The method according to claim 18, wherein the appliance is a refrigerator, a freezer, a food processor, a dishwashers, a food blender, a beverage maker, a coffeemaker, or an iced-tea maker.

21. The method according to claim 17, wherein the primary function of the appliance is associated with environmental control, and the appliance is part of, an HVAC system.

22. The method according to claim 21, wherein the primary function of the appliance is associated with temperature control, and wherein the appliance is an air conditioner or a heater.

23. The method according to claim 17, wherein the primary function of the appliance is associated with cleaning, wherein the appliance primary function is associated with clothes cleaning and the appliance is a washing machine or a clothes dryer, or wherein the appliance is a vacuum cleaner.

24. The method according to claim 17, wherein the appliance is an answering machine, a telephone set, a home cinema system, a HiFi system, a CD or DVD player, an electric furnace, a trash

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compactor, a smoke detector, a light fixture, or a dehumidifier.

25. The method according to claim 1, wherein the actuator is an electric light source for converting electrical energy into light that emits visible or non-visible light for illumination or indication, and the non-visible light is infrared, ultraviolet, X-rays, or gamma rays.

26. The method according to claim 25, wherein the electric light source comprises, a lamp, an incandescent lamp, a gas discharge lamp, a fluorescent lamp, a Solid-State Lighting (SSL), a Light Emitting Diode (LED), an Organic LED (OLED), a polymer LED (PLED), or a laser diode.

27. The method according to claim 1, wherein the actuator is a motion actuator that causes linear or rotary motion.

28. The method according to claim 1, wherein the actuator is a sounder for converting an electrical energy to omnidirectional, unidirectional, or bidirectional pattern emitted, audible or inaudible, sound waves.

29. The method according to claim 28, wherein the sounder comprises an electromagnetic loudspeaker, a piezoelectric speaker, an electrostatic loudspeaker (ESL), a ribbon or planar magnetic loudspeaker, or a bending wave loudspeaker, or wherein the sounder comprises an electric bell, a buzzer (or beeper), a chime, a whistle or a ringer.

30. The method according to claim 28, wherein the operating of the actuator comprises playing digital audio content that is pre-recorded or synthesized, or wherein the operating of the actuator comprises simulating the voice of a human being or generating music, or wherein the operating of the actuator comprises sounding a syllable, a word, a phrase, a sentence, a short story, or a long story, using male or female voice.

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Electronic Acknowledgement Receipt

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Confirmation Number:	1088
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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.

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Paper No. 20180227

Application No.:	15/657,163	**Date Mailed:**	2018-02-28
First Named Inventor:	Yehuda BINDER	Examiner:	KHAN, HASSAN ABDUR-
Attorney Docket No.:	BINDER-014-US3	Art Unit:	2456
Confirmation No.:	1088	Filing Date:	07/23/2017

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

Commissioner for Patents

PTO-90c (Rev.08-06)

Notification of Non-Compliant Appeal Brief (37 CFR 41.37)	**Application No.** 15/657,163	**Applicant(s)** BINDER et al.	
	Examiner KHAN, HASSAN ABDUR-RAHMAN	**Art Unit** 2456	**AIA Status** No

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

The Appeal Brief filed on 18 February 2018 is defective for failure to comply with one or more provisions of 37 CFR 41.37(c).

To avoid dismissal of the appeal, applicant must file an amended brief or other appropriate correction (see MPEP 1205.03) within **ONE MONTH or THIRTY DAYS** from the mailing date of this Notification, whichever is longer. **EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136.**

1. ☐ The brief does not contain the items required under 37 CFR 41.37(c), or the items are not under the proper heading or in the proper order.

2. ☑ (a) The brief does not contain a concise explanation of the subject matter defined in each of the rejected independent claims, referring to the specification in the Record by page and line number or by paragraph number and to the drawings, if any, by reference characters; and/or (b) the brief fails to identify, for each rejected independent claim and for each dependent claim argued separately that contains a means plus function or step plus function recitation under 35 U.S.C. 112, sixth paragraph, the structure, material, or acts described in the specification as corresponding to each claimed function with reference to the specification in the Record by page and line number or paragraph number, and to the drawings, if any, by reference characters (37 CFR 41.37(c)(1)(iii)).

3. ☐ The brief does not contain a correct copy of the appealed claims as an appendix thereto (37 CFR 41.37(c)(1)(v)).

4. ☑ Other (including any explanation in support of the above items):

The Summary of Claimed Subject Matter is non-compliant, as it does not reference the independent claim 1 , to the specification (filed 7/23/17) in the Record by page and line number and to the drawings, if any, by reference characters. Reference to the Patent Application Publication does not satisfy the requirement of 37 CFR 41.3(c) (1) (iii). An entire new Appeal Brief is not necessary only the corrected section..

/ BRIDGET C. MONROE / Patent Appeals Specialist
(571)272-1651

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEALS BOARD (PTAB)

ATTY.'S DOCKET: BINDER-014-US3

In re Application of:	)	Confirmation No. 1088
	)	
Yehuda BINDER	)	Art Unit: 2456
	)	
Appln. No.: 15/657,163	)	Examiner: Khan, Hassan Abdu
	)	
Filed: July 23, 2017	)	Washington, D.C.
	)	
For: SYSTEM AND METHOD FOR SERVER BASED CONTROL	)	February 18, 2018
	)	

Mail Stop Appeal Brief - Patents
Honorable Commissioner for Patents
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Honorable Commissioner:

APPEAL BRIEF

Appellant submit this Appeal Brief to the PATENT TRIAL AND APPEALS BOARD (PTAB) on appeal from the decision of the Examiner of Group Art Unit 2456 dated January 25, 2018, finally rejecting all pending claims under 35 U.S.C. 103 (a) [hereinafter 'Action' or 'Final action'].

Real Party of Interest

The real party in interest is May Patents Ltd., the assignee of record.

Related Appeals and Interferences

Appellant assert that no other appeals, interferences or Judicial proceedings are known to the Appellant, the Appellant legal representative that will

directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

Status of Claims

Claims 1-30 are pending in the application, and are attached in Appendix A. The pending claims stand rejected in the Final Action dated January 25, 2018 under 35 U.S.C. §103(a).

Status of Amendments

No amendments have been made to the pending claims in response to the final Office Action dated January 25, 2018.

Summary of Claimed Subject Matter

[The referred paragraphs are the paragraphs in the parent application publication 2013/0201316].

Claim 1 discloses a method for operating an actuator (such as item 61a, 61b in Figure 6) in a controlled device (item 23a, 23b, or 23c in Figure 2, item 60 in Figure 5, paragraph 0370) in response to captured human voice data, for use with a client device (item 13a, 13b, or 13c in Figure 1, item 23a, 23b, or 23c in Figure 2, item 50 in Figure 5, paragraph 0289) in a building (such as item 189 in Figure 2) communicating over a wireless network (such as numerals 14a, 14b, or 22 in Figure 2 or Figure 24, paragraphs 0033, 0270, 0487) and an Internet-connected server device (item 24 in Figure 2, item 151 in figure 15, paragraphs 0270-0271) external to the building. The method comprises capturing (item 171 in Figure 17), by a microphone (such as 51a, 51b in Figure 5) in the client device, the human voice data; sending to the server, by the client device via the wireless network, the

captured human voice data; receiving (item 192 in Figure 19), by the server over the Internet, the captured human voice data; processing (item 192 in Figure 19), by the server, the captured human voice data; responsive to the processing, sending (item 175 in Figure 19) a message, by the server to the client over the Internet; receiving, by the controlled device via the wireless network, the message; and operating the actuator (paragraphs 0357, 0370) in the controlled device in response to the received message (item 150a in Figure 15a, item 170 in Figure 17, paragraphs 0052, 0128, 0131-0133, 0486).

Ground of Rejection to be Reviewed on Appeal

In the Action dated January 25, 2018, claims 1-30 are finally rejected under 35 U.S.C. 103(a).

Argument

Argument #1: Improper rejection format

The Action is vague and unclear since it provides no more than copied passages from the references. It is not clear how claimed elements or features are equated to elements or features in the references. Since the rejection is not made explicit (Examiner did not correlate claimed elements to elements in the prior art with a reference to figures or description), the Appellant cannot reasonably determine which element is believed to correspond to each of the claimed limitations and is forced to guess which features in the cited art the Examiner believed to disclose such claimed features.

It is submitted that "*A rejection must be set forth in sufficiently articulate and informative manner as to meet the notice requirement of § 132, such as by identifying where*

or how each limitation of the rejected claims is met by the prior art references." [In re Jung, 637 F.3d 1356, 1363 (Fed. Cir. 2011)]; see also 37 C.F.R. § 1.104(c)(2) ("*When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable.*"). Further, the" PTO must create a record that includes "specific fact findings for each contested limitation and satisfactory explanations for such findings."" [Gechter v. Davidson 116 F.3d 1454, 1460 (Fed. Cir. 1997)], and "*It is neither our place, nor Appellants*' burden, to speculate as to the basis for rejecting claims. Furthermore, the Supreme Court in KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 **should be made explicit.**(Emphasis added).

It is thus respectfully requested that if the rejection is affirmed, the application will be remanded for a clearer rejection.

Office Action, section 6 pages 3-5

Claims 1-30 are rejected under pre-AIA 35 U.S.C. 101 as being directed to a judicial exception.

Argument #2: The claims are patent eligible under §101

a. It is respectfully submitted that these claims are not directed to a judicial exception at least because the claim limitations include various tangible and physical activities, that cannot be considered as abstract. It is noted that none of the examples provided in the USPTO guidelines include signal processing (such as processing human voice) and affecting a physical phenomenon based on such analysis.

b. Claim 1 recites, *inter alia*, the limitations of :" … *receiving, by the controlled device via the wireless network, the message; and operating the actuator in the controlled device in response to the received message.*". The analysis in the Action is silent regarding to these limitations, and fails to show why these limitations are not patent eligible. It is submitted that these actions are clearly can not be characterized as "Abstract Idea".

c. The claims is characterized as 'Abstract Idea' since (top of page 4) it is "… *leaving nothing but a storage medium, processor and instructions remaining, which are part of* ***a general purpose computer.***" (Emphasis added). The Actions clearly refers to a SINGLE computer – However, the claim clearly defines THREE different computerized entities (controlled device, client device, and an Internet-connected server) that communicate over TWO networks: wireless network and the Internet. Hence, the Action mis-characterize the claimed invention, which is clearly an improvement rooted in computer networking technology and directed to solving a problem in the hardware / software / control arts.

d. In section 13 of the Action (top of page 25), the Examiner notes that "… *Beliles discloses a method and system for* ***dynamically responding*** *to network events, by* ***collecting monitored data from sensors*** *and* ***detecting network events / notification*** *and then responding accordingly,* ***which is analogous to the teaching of the applicant's specifications.***" (Emphasis added). Hence, it is admitted by the Office that the claimed invention is clearly more than ***'a general purpose computer'***, but also involves 'dynamic responding', 'collecting data from sensors', 'detecting network events', each of which is clearly NOT part of ***'a general purpose computer'***, and further clearly an improvement rooted in computer networking

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technology and directed to solving a problem in the hardware / software / control arts.

e. First, the Action overlook various steps in claim 1 and in the various dependent claims. Second, the Action equates 'capturing the human voice data' to '*obtaining and comparing intangible data*' – A human voice cannot be considered as 'intangible data' and capturing the voice by a microphone cannot be considered as '*obtaining and comparing*' in general, and '*obtaining and comparing intangible data*' in particular. Third, the Action equates 'processing by the server' to '*collecting and comparing known information*' – A human voice cannot be considered as '*known information*', and voice processing cannot be equated to any '*collecting and comparing*' in general, and '*collecting and comparing known information*' in particular. Further, the Action states that the invention relates to '*a storage medium, processor and instructions remaining, which are part of a general purpose computer*'. Such characterization overlooks the claimed structure of three different devices (controlled device, client device, and a server) communicating with each other in a defined way. Such a structure cannot be considered as '*general purpose computer*'.

f. The claims are clearly associated with particular types of devices - apparatus / device / system – hence relating to a tangible matter. By definition, tangible matter cannot be considered as 'abstract'. It is further submitted that according to the guidelines and the examples published in the USPTO guidelines after Alice for determining eligibility, no apparatus claim were found ineligible as 'abstract idea'. Hence, the §101 rejection should not apply, and the claims should be found patent eligible.

g. The Action states (bottom of page 3) that the step of 'capturing the human voice' is an 'Abstract Idea of Itself'

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based on "*(obtaining and comparing intangible data, CyberSource)*". However, while the CyberSource case involved handling business data that is indeed intangible data, the claimed invention involves capturing human voice data, which is clearly **tangible data relating to a physical entity.**

Office Action, section 7 pages 6-23

Claims 1-4, 6-14, 16 and 27-30 are rejected under pre-AIA 35 U.S.C. 103 as being unpatentable over Beliles *et al.* (US 2007/0283005 – hereinafter "Beliles"), in view of Buck *et al.* (US 2009/0089065 – hereinafter "Buck"), and in view of Urano *et al.* (US 2008/0307075 – hereinafter "Urano").

Regarding claim 1

Argument #3: The Beliles reference does not teach the recited features.

The Action relies upon the Beliles reference as a support for the claim 1 preamble stating: "*A method for operating an actuator in a controlled device in response to captured human voice data, for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building, …*", based on paragraphs 0004, 0009, and 0015-0017 of the Beliles reference. It is submitted that these cited paragraphs do not disclose or mention the recited limitations of 'Internet-connected server' and 'wireless network'.

Further, it is respectfully submitted that the Beliles reference is not in analogous field, and affectively teaches away from the claimed invention. The Beliles reference is based upon for the recited limitations of "*A method … for use with a client device in a building communicating over a*

wireless network and an Internet-connected server device external to the building, …". First, while this passage explicitly recites a wireless network, the Beliles reference focuses on a wired network, and the disclosure in general, and the cited paragraphs 0009, 0015-0017 in particular, are silent regarding any wireless networking. Thus, since the rejection is based on , as stated on top of page 8, on Beliles disclosing "… *method for use with client device in a building communicating over a wireless network and an Internet-connected server device external to the building,* … ***as disclosed by Beliles,*** *…",* the rejection cannot be sustained.

Second, the claimed invention recites, inter alia, an Internet-connected server that is **external to the building**, for processing the received microphone (sensor) data and in response controlling an actuator. The Beliles reference in general, and the cited paragraphs in particular, are silent regarding any device communicating over a wireless network to an 'Internet-connected server', and in particular any communication with any device external to the building. Further, the Beliles invention dictates that decisions to activate any actuator are based on a policy table 400 (see FIGs. 2 and 4) that is part of a network device **in the building.**

Argument #4: The Beliles reference teaches away from the claimed invention

The claimed invention recites operating an actuator in response to capturing human voice, hence referring to **intentional and deliberate actuator control by a human.** In contrast, the Beliles invention focuses on security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and

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for detecting unwanted problems or disasters such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037).

Argument #5: Improper combination of the Beliles and Buck references.

a. The Action states in general that these references are in an analogous art. However, the Action fails to explain WHY the Beliles and the Buck references are analogous. In case that the Action suggests that these reference are analogous since they are in the same field, a clear definition of that field is respectfully requested.

b. The Appellant submits that the Beliles and Buck references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Action does not explain, as required by the rules, what is the reasoning behind the combining of the Beliles and Buck references, and why these references are analogous to each other.

Further, the rejection is conclusory and insufficient to provide any *prima facie* burden for a rejection. Further, Section 2143.01 of the MPEP states: "*The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness.*". Hence, the stated rationale cannot be considered as "objective evidence of non-obviousness" and fails to show "… **objective reason** to combine the teachings of the references."[MPEP 2143.01 (IV)](Emphasis added), and further by using facts gleaned from the claim or the specification, the Action fails to show a conclusion that is reached "… *on the basis of the facts* ***gleaned from the prior art.***" [MPEP 2142](Emphasis added).

Further, MPEP § 2145(X)(A)states that "*Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and* ***does not include knowledge gleaned only from applicant's disclosure,*** *such a reconstruction is proper, quoting In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971), (Emphasis added).*"

c. The Beliles and Buck references are non-analogous at least because the Beliles reference discloses a system **in a building** and the Buck reference discloses a system **in a vehicle.** Further, the Beliles reference teaches security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and **for detecting unwanted problems or disasters** such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037), **in a stationary environment in a building.** In contrast, the Buck reference teaches away from these features by teaching **'hands free'** (paragraph 0005) operation in a **moving vehicle.**

The above is further supported by the fact that Beliles is classified under U.S. Class 709/224 relating to 'ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MULTICOMPUTER DATA TRANSFERRING - COMPUTER NETWORK MANAGING' dealing with computer network management, while Buck is classified in Class/Subclass 704/275 associated with "DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION - Speech assisted network", relating to signal processing. Handling computer networks is clearly distinct from any speech processing. It is noted that MPEP §808.02(A) explicitly

recites that ***different classes*** "… ***shows that each invention has attained recognition in the art as a separate subject for inventive effort, and also a separate field of search.***" (Emphasis added). Furthermore, different classes were relied upon in a restriction requirement that was issued by the SAME Examiner in a parent application 13/733,634 dated October 6, 2016.

Further, according to the restriction requirement that was issued by the SAME Examiner in a parent application 13/733,634 dated October 6, 2016, a restriction was required between Invention group I that is drawn to "*a system for commanding an actuator operation in response to a sensor response*" and Invention group V that is drawn to "*vehicle control system*". The restriction requirement itself states on page 2 that these inventions "… **are not obvious variant**" (Emphasis added), hence, **these two features is patentably different**, and thus cannot be combined. Further, MPEP §806.04(h) explicitly recites that "***Species Must Be Patentably Distinct From Each Other***". It is improper to apply a 'double standard' to the legal term of 'not obvious' – one for restriction and one for §103 rejection. Hence, it is admitted by the Office that vehicle control, as stated in the rationale, is non-obvious to be added to other systems.

Argument #6: Improper rationale for combining the Beliles and Buck references.

The rationale for combining the Beliles and Buck references is stated on top of page 9 as: "… *for the purpose of implementing the techniques for adjustment of vehicle elements through speech control*". This rationale amounts to nothing more than an unsupported and unexplained conclusory statement, while the Office cannot rely solely on common

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knowledge or common sense to support its findings. Further, it is settled that the Office should provide a "satisfactory explanation" for the motivation for a finding that includes an express and **"rational" connection with the evidence presented.** Furthermore, MPEP 2143 clearly states that "*Any rationale employed must provide* ***a link between the factual findings and the legal conclusion of obviousness.***" (Emphasis added).

First, the primary reference that is modified by the Action is the Beliles reference. **However, the Beliles reference is NOT disclosing any vehicle or vehicle elements, and is NOT disclosing any speed or speed control, rendering the rationale as moot.**

Further, the Action is based on paragraph 0028 of the Buck reference, which is not related and does not mention any speed in general, and speed control in particular. Furthermore, it is not clear, and technically incorrect, that adding an actuator that is voice controlled results in, or supports, any "*adjustment of vehicle elements through speech control*", as suggested by the stated rationale.

Argument #7: Improper combination of the Beliles and Urano references.

a. The Action states in general that these references are in an analogous art. However, the Action fails to explain WHY the Beliles and the Buck references are analogous. In case that the Action suggests that these reference are analogous since they are in the same field, a clear definition of that field is respectfully requested.

b. The Appellant submits that the Beliles and Buck references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically

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be combined. The Action does not explain, as required by the rules, what is the reasoning behind the combining of the Beliles and Buck references, and why these references are analogous to each other.

Further, the rejection is conclusory and insufficient to provide any *prima facie* burden for a rejection. Further, Section 2143.01 of the MPEP states: "*The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness*.". Hence, the stated rationale cannot be considered as "objective evidence of non-obviousness" and fails to show "… **objective reason** to combine the teachings of the references."[MPEP 2143.01 (IV)](Emphasis added), and further by using facts gleaned from the claim or the specification, the Action fails to show a conclusion that is reached "… *on the basis of the facts* ***gleaned from the prior art.***" [MPEP 2142](Emphasis added). Further, MPEP § 2145(X)(A)states that "*Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and* ***does not include knowledge gleaned only from applicant's disclosure,*** *such a reconstruction is proper, quoting In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971), (Emphasis added).*"

c. The Beliles and Urano references are non-analogous at least because the Beliles reference focuses on security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and **for detecting unwanted problems or disasters** such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037), **in a stationary environment in a**

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building. In contrast, the Urano reference in general, and the cited paragraphs 0101-0104 in particular, dictate devices that are **'worn by the respective person', hence portable and human operated.**

Further, according to the restriction requirement that was issued by the SAME Examiner in a parent application 13/733,634 dated October 6, 2016, a restriction was required between Invention group I that is drawn to "*a system for commanding an actuator operation in response to a sensor response*" and Invention group IV that is drawn to "*a control system for commanding an actuator operation in response to processing of voice*". The restriction requirement itself states on page 2 that these inventions "… **are not obvious variant**" (Emphasis added), hence, **these two features is patentably different**, and thus cannot be combined. Further, MPEP §806.04(h) explicitly recites that "***Species Must Be Patentably Distinct From Each Other***". It is improper to apply a 'double standard' to the legal term of 'not obvious' – one for restriction and one for §103 rejection. Hence, it is admitted by the Office that voice-based control, as stated in the rationale, is non-obvious to be added to other systems.

Argument #8: Improper rationale for combining the Beliles and Urano references.

The rationale for combining is stated on top of page 9 as: "… *for improved energy efficiency*". First, the primary reference that is modified by the Action is the Beliles reference. The Urano reference is combined with the Beliles reference for disclosing relating to capturing by a microphone of human voice data and sending the captured human voice data. These features are not relevant to any energy consumption in general, and to any "*improved energy efficiency*" as stated in

the rationale in particular, hence this rationale for combining these references is moot.

Further, the Action is based on paragraphs 0101-0104 of the Urano reference, which is not related and does not mention any powering or energy in general, and "*improved energy efficiency*" in particular. Furthermore, it is not clear, and technically incorrect, that adding components, such as microphone and sending captured voice to a server results in, or supports in any way, any "*improved energy efficiency*", as suggested by the stated rationale.

Hence, this rationale amounts to nothing more than an unsupported and unexplained conclusory statement, while the Office cannot rely solely on common knowledge or common sense to support its findings. Further, it is settled that the Office should provide a "satisfactory explanation" for the motivation for a finding that includes an express and **"rational" connection with the evidence presented.** Furthermore, MPEP 2143 clearly states that "*Any rationale employed must provide* ***a link between the factual findings and the legal conclusion of obviousness.***" (Emphasis added).

Regarding claim 2

Argument #9: No rationale provided for combining with Beliles

Claim 2 recites the limitation of "… *the controlled device is part of, integrated with, or the same as, the client device*.". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 3

Argument #10: No rationale provided for combining with Beliles

Claim 3 recites the limitation of "… *the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 4

Argument #11: No rationale provided for combining with Beliles

Claim 4 recites the limitations of "*a sensor that outputs sensor data that responds to a physical phenomenon*" and "*sending to the server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 6

Argument #12: No rationale provided for combining with Beliles

Claim 6 recites the limitations of "… *the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon.*". However, no rationale is

provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 8

Argument #13: No rationale provided for combining with Beliles

Claim 8 recites the limitations of "… *the client device comprises multiple microphones*" and "… *the capturing comprises capturing, by the multiple microphones in the client device, the human voice data*.". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Furthermore, the limitation of "… *the capturing comprises capturing, by the multiple microphones in the client device, the human voice data*." further defines the limitation of "… capturing, by a microphone in the client device, the human voice data …". As stated on page 8, the Action **relies upon the Urano reference** for this limitation, hence it is improper **to rely on the Buck reference** for the narrowing limitation in this claim.

Regarding claim 9

Argument #14: Improper characterization.

The applicant disagrees that this claim '… *does not teach or further define over the limitation in claim 8*' as stated in the rejection. Claim 9 recites that "… *the multiple microphones are arranged as a directional microphones array*

operative to estimate a number, magnitude, frequency, Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array.”. Such usage of the multiple microphones is technically non-obvious and patentable.

It is submitted that this limitation is not found in the applied references, and are patentable distinctions over the prior art. Further, it is noted that according to MPEP: “*All Claim Limitations Must Be Considered*” (MPEP 2143.03), and that “*All words in a claim must be considered in judging the patentability of that claim against the prior art.*” In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494,496 (CCPA 1970).

Regarding claim 13

Argument #15: No rationale provided for combining with Beliles

Claim 13 recites the limitations of “… *the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005 standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, or Z-Wave™ standards.”*. However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. In particular, it is not clear why the wireless network relied upon of the Beliles reference is a WPAN one. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 16

Argument #16: No rationale provided for combining with Beliles

Claim 16 recites the limitations of "… *the wireless network is a cellular telephone network that is a Third Generation (3G) network that uses UMTS W-CDMA, UMTS HSPA, UMTS TDD, CDMA2000 1xRTT, CDMA2000 EV-DO, or GSM EDGE-Evolution, and wherein the cellular telephone network is a Fourth Generation (4G) network that uses HSPA+, Mobile WiMAX, LTE, LTE-Advanced, MBWA, or is based on IEEE 802.20-2008.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. In particular, it is not clear why the wireless network relied upon of the Beliles reference is a cellular one. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 28

Argument #17: No rationale provided for combining with Beliles

Claim 28 recites the limitations of "… *the actuator is a sounder for converting an electrical energy to omnidirectional, unidirectional, or bidirectional pattern emitted, audible or inaudible, sound waves.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. In particular, the rationale for combining the Beliles and Buck references is stated on top of page 9 as: "… *for the purpose of implementing the techniques for adjustment of vehicle elements through speech control*", and a sounding by a sounder cannot be considered as '*adjustment of vehicle elements*'.

Office Action, section 8 pages 15-17

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Claims 5 and 15 are rejected under pre-AIA 35 U.S.C. 103 as being unpatentable over Beliles *et al.* (US 2007/0283005 – hereinafter "Beliles"), in view of Buck *et al.* (US 2009/0089065 – hereinafter "Buck"), in view of Urano *et al.* (US 2008/0307075 – hereinafter "Urano"), and further in view of Gelvin *et al.* (US 2015/0046582 – hereinafter "Gelvin").

Regarding claims 5, 15

Argument #18: Improper combination of the Beliles and Urano references.

a. The Action does not state Why the Beliles and the Buck references are combines, or WHY they are in an analogous art, as required by the rules. In case that the Action suggests that these reference are analogous since they are in the same field, a clear definition of that field is respectfully requested.

b. The Appellant submits that the Beliles and Gelvin references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Action does not explain, as required by the rules, what is the reasoning behind the combining of the Beliles and Gelvin references, and why these references are analogous to each other.

Further, the rejection is conclusory and insufficient to provide any *prima facie* burden for a rejection. Further, Section 2143.01 of the MPEP states: "*The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness.*". Hence, the stated rationale cannot be considered as "objective evidence of non-obviousness" and fails to show "… **objective reason** to

combine the teachings of the references."[MPEP 2143.01 (IV)](Emphasis added), and further by using facts gleaned from the claim or the specification, the Action fails to show a conclusion that is reached "… *on the basis of the facts* ***gleaned from the prior art.***" [MPEP 2142](Emphasis added). Further, MPEP § 2145(X)(A)states that "*Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and* ***does not include knowledge gleaned only from applicant's disclosure,*** *such a reconstruction is proper, quoting In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971), (Emphasis added).*"

c. The Beliles and Gelvin references are non-analogous art involving two different fields. The Beliles reference, as admitted by the Action itself, is in the field of computer networks in a building environment (see e.g., paragraphs 0004-0006). In contrast, the Gelvin reference is directed to a vehicular environment. According to a restriction requirement in this application dated October 6, 2016, on page 2, invention group V '*drawn to a vehicular control system*' is a different invention that is '***not obvious variant***'(Emphasis added) of the other inventions, such as invention group I pertaining to claim 1. Hence, **these two features is patentably different**, and thus cannot be combined. Further, MPEP §806.04(h) explicitly recites that "***Species Must Be Patentably Distinct From Each Other***". Furthermore, the restriction requirement in this application dated October 6, 2016, on page 10, defined the subject matter of claims 104-108 as different species BG.

Argument #19: Improper rationale for combining the Beliles and Abe references

The rationale for combining is stated on page 17 as: "… *for the purpose of implementing a distributed network and Internet access to sensors, controls, and processors* …". However, in the rejection of claim 1 in page 6 of the Action, the Action states that the Beliles reference discloses "*A method for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building,* …". Hence according to Action itself, this rationale for combining is already found in the Beliles reference, thus there is no motivation for such combining, and since the Office admits that the primary reference (Beliles) already had the capabilities that the secondary reference (Gelvin) provided with its added disclosures, no obviousness may be sustained. (*In Square, Inc. v. Cooper, IPR2014-00158, Paper No. 8, at 30 (15 May 2014)*). Further, it is not be appropriate to base this rejection on a combination of these references because the systems in Beliles and Gelvin are each self-contained and independently operate effectively:

> *Because each device independently operates effectively, a person having ordinary skill in the art, who was merely seeking to create a better device to drain fluids from a wound, would have no reason to combine the features of both devices into a single device.*

Kinetic Concepts v. Smith and Nephew, 688 F.3d 1342, at 1369 (CAFC, 2012).

Further, claim 5 further defines various sensors, such as a thermoelectric sensor or a photoelectric sensor. The stated rationale for combining is not relevant to these limitations: The type of sensors is not relevant to any 'implementation of a distributed network'.

Regarding claim 15

Argument #20: No rationale provided for combining with Beliles

Claim 15 recites the limitations of "… *the wireless network uses a wireless communication over a licensed or an unlicensed radio frequency band, that is an Industrial, Scientific and Medical (ISM) radio band.*". However, no rationale is provided in the Action for combining these features, even if taught by the Gelvin reference, to the Beliles reference. In particular, it is not clear why the wireless network relied upon of the Beliles reference is according to the claim. The rationale stated for claim 5 is not relevant to this claim, and relates to combination of other non-relevant elements.

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Conclusion

In conclusion, the rejection of claims 1-30 under 35 U.S.C. 103(a) should be cancelled, resulting allowance of the all pending claims. Attached hereto is an Appendix containing a copy of the claims involved in this appeal.

Respectfully submitted,

By /Yehuda Binder/
Yehuda Binder
Registration No. 73,612

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Appendix A – Pending claims

1. A method for operating an actuator in a controlled device in response to captured human voice data, for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building, the method comprising:

capturing, by a microphone in the client device, the human voice data;

sending to the server, by the client device via the wireless network, the captured human voice data;

receiving, by the server over the Internet, the captured human voice data;

processing, by the server, the captured human voice data;

responsive to the processing, sending a message, by the server to the client over the Internet;

receiving, by the controlled device via the wireless network, the message; and

operating the actuator in the controlled device in response to the received message.

2. The method according to claim 1, wherein the controlled device is part of, integrated with, or the same as, the client device.

3. The method according to claim 1, wherein the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person.

4. The method according to claim 1, wherein the client device further comprises a sensor that outputs sensor data that responds to a physical phenomenon, wherein the method further comprising sending to the server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data.

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5. The method according to claim 4, wherein the sensor is a thermoelectric sensor that responds to a temperature or to a temperature gradient of an object using conduction, convection, or radiation, wherein the sensor is a photoelectric sensor that responds to a visible or an invisible light, the invisible light is infrared, ultraviolet, X-rays, or gamma rays, wherein the photoelectric sensor is based on the photoelectric or photovoltaic effect, and comprises a semiconductor component that comprises a photodiode, a phototransistor, or a solar cell, or wherein the photoelectric sensor is based on Charge-Coupled Device (CCD) or a Complementary Metal-Oxide Semiconductor (CMOS) element.

6. The method according to claim 1, wherein the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon.

7. The method according to claim 6, wherein the physical phenomenon comprises temperature, humidity, pressure, audio, vibration, light, motion, sound, proximity, flow rate, electrical voltage, or electrical current.

8. The method according to claim 1, wherein the client device comprises multiple microphones, and wherein the capturing comprises capturing, by the multiple microphones in the client device, the human voice data.

9. The method according to claim 8, wherein the multiple microphones are arranged as a directional microphones array operative to estimate a number, magnitude, frequency, Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array.

10. The method according to claim 1, wherein the microphone is an omnidirectional, unidirectional, or bidirectional microphone that is based on the sensing an incident sound based motion of a diaphragm or a ribbon, or wherein the

microphone comprises a condenser, an electret, a dynamic, a ribbon, a carbon, or a piezoelectric microphone.

11. The method according to claim 1, wherein the client device or the controlled device are addressable in the wireless network or the Internet using distinct locally administered addresses or a universally administered digital addresses stored in a volatile or non-volatile memory of the respective device and uniquely identifying the respective device in the network.

12. The method according to claim 11, wherein the digital address is a MAC layer address that is MAC-48, EUI-48, or EUI-64 address type or wherein the digital address is a layer 3 address and is static or dynamic IP address that is IPv4 or IPv6 type address.

13. The method according to claim 1, wherein the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005 standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, or Z-Wave™ standards.

14. The method according to claim 1, wherein the wireless network is a Wireless LAN (WLAN) that is according to, or base on, IEEE 802.11-2012, IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, or IEEE 802.11ac.

15. The method according to claim 1, wherein the wireless network uses a wireless communication over a licensed or an unlicensed radio frequency band, that is an Industrial, Scientific and Medical (ISM) radio band.

16. The method according to claim 1, wherein the wireless network is a cellular telephone network that is a Third Generation (3G) network that uses UMTS W-CDMA, UMTS HSPA, UMTS TDD, CDMA2000 1xRTT, CDMA2000 EV-DO, or GSM EDGE-Evolution,

and wherein the cellular telephone network is a Fourth Generation (4G) network that uses HSPA+, Mobile WiMAX, LTE, LTE-Advanced, MBWA, or is based on IEEE 802.20-2008.

17. The method according to claim 1, wherein the client device or the controlled device is integrated in, is part of, or is entirely included in, an appliance.

18. The method according to claim 17, wherein the primary functionality of the appliance is associated with food storage, handling, or preparation.

19. The method according to claim 18, wherein the primary function of the appliance is heating food, and wherein the appliance is a microwave oven, an electric mixer, a stove, an oven, or an induction cooker.

20. The method according to claim 18, wherein the appliance is a refrigerator, a freezer, a food processor, a dishwashers, a food blender, a beverage maker, a coffeemaker, or an iced-tea maker.

21. The method according to claim 17, wherein the primary function of the appliance is associated with environmental control, and the appliance is part of, an HVAC system.

22. The method according to claim 21, wherein the primary function of the appliance is associated with temperature control, and wherein the appliance is an air conditioner or a heater.

23. The method according to claim 17, wherein the primary function of the appliance is associated with cleaning, wherein the appliance primary function is associated with clothes cleaning and the appliance is a washing machine or a clothes dryer, or wherein the appliance is a vacuum cleaner.

24. The method according to claim 17, wherein the appliance is an answering machine, a telephone set, a home cinema system, a HiFi system, a CD or DVD player, an electric furnace, a trash

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compactor, a smoke detector, a light fixture, or a dehumidifier.

25. The method according to claim 1, wherein the actuator is an electric light source for converting electrical energy into light that emits visible or non-visible light for illumination or indication, and the non-visible light is infrared, ultraviolet, X-rays, or gamma rays.

26. The method according to claim 25, wherein the electric light source comprises, a lamp, an incandescent lamp, a gas discharge lamp, a fluorescent lamp, a Solid-State Lighting (SSL), a Light Emitting Diode (LED), an Organic LED (OLED), a polymer LED (PLED), or a laser diode.

27. The method according to claim 1, wherein the actuator is a motion actuator that causes linear or rotary motion.

28. The method according to claim 1, wherein the actuator is a sounder for converting an electrical energy to omnidirectional, unidirectional, or bidirectional pattern emitted, audible or inaudible, sound waves.

29. The method according to claim 28, wherein the sounder comprises an electromagnetic loudspeaker, a piezoelectric speaker, an electrostatic loudspeaker (ESL), a ribbon or planar magnetic loudspeaker, or a bending wave loudspeaker, or wherein the sounder comprises an electric bell, a buzzer (or beeper), a chime, a whistle or a ringer.

30. The method according to claim 28, wherein the operating of the actuator comprises playing digital audio content that is pre-recorded or synthesized, or wherein the operating of the actuator comprises simulating the voice of a human being or generating music, or wherein the operating of the actuator comprises sounding a syllable, a word, a phrase, a sentence, a short story, or a long story, using male or female voice.

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Electronic Acknowledgement Receipt

EFS ID:	31816222
Application Number:	15657163
International Application Number:	
Confirmation Number:	1088
Title of Invention:	SYSTEM AND METHOD FOR SERVER-BASED CONTROL
First Named Inventor/Applicant Name:	Yehuda BINDER
Customer Number:	131926
Filer:	Yehuda Binder
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Attorney Docket Number:	BINDER-014-US3
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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.

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Paper No. 20180213

Application No.:	15/657,163	**Date Mailed:**	2018-02-14
First Named Inventor:	Yehuda BINDER	Examiner:	KHAN, HASSAN ABDUR-
Attorney Docket No.:	BINDER-014-US3	Art Unit:	2456
Confirmation No.:	1088	Filing Date:	07/23/2017

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

Commissioner for Patents

PTO-90c (Rev.08-06)

Notification of Non-Compliant Appeal Brief (37 CFR 41.37)	**Application No.** 15/657,163	**Applicant(s)** BINDER et al.	
	Examiner KHAN, HASSAN ABDUR-RAHMAN	**Art Unit** 2456	**AIA Status** No

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

The Appeal Brief filed on 05 February 2018 is defective for failure to comply with one or more provisions of 37 CFR 41.37(c).

To avoid dismissal of the appeal, applicant must file an amended brief or other appropriate correction (see MPEP 1205.03) within **ONE MONTH or THIRTY DAYS** from the mailing date of this Notification, whichever is longer. **EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136.**

1. ☐ The brief does not contain the items required under 37 CFR 41.37(c), or the items are not under the proper heading or in the proper order.

2. ☐ (a) The brief does not contain a concise explanation of the subject matter defined in each of the rejected independent claims, referring to the specification in the Record by page and line number or by paragraph number and to the drawings, if any, by reference characters; and/or (b) the brief fails to identify, for each rejected independent claim and for each dependent claim argued separately that contains a means plus function or step plus function recitation under 35 U.S.C. 112, sixth paragraph, the structure, material, or acts described in the specification as corresponding to each claimed function with reference to the specification in the Record by page and line number or paragraph number, and to the drawings, if any, by reference characters (37 CFR 41.37(c)(1)(iii)).

3. ☐ The brief does not contain a correct copy of the appealed claims as an appendix thereto (37 CFR 41.37(c)(1)(v)).

4. ☐ Other (including any explanation in support of the above items):

The Summary of Claimed Subject Matter is non- compliant as it does not reference the Independent claims to the specification in the Record by page and line number. The original specification was not submitted in paragraph form. An entire new Brief is not necessary only the corrected section..

EVERETT R WILLIAMS
(571)272-3619

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEALS BOARD (PTAB)

ATTY.'S DOCKET: BINDER-014-US3

In re Application of:	)	Confirmation No. 1088
	)	
Yehuda BINDER	)	Art Unit: 2456
	)	
Appln. No.: 15/657,163	)	Examiner: Khan, Hassan Abdu
	)	
Filed: July 23, 2017	)	Washington, D.C.
	)	
For: SYSTEM AND METHOD FOR SERVER BASED CONTROL	)	February 5, 2018
	)	

Mail Stop Appeal Brief - Patents
Honorable Commissioner for Patents
U.S. Patent and Trademark Office
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Alexandria, Virginia 22313-1450

Dear Honorable Commissioner:

APPEAL BRIEF

Appellant submit this Appeal Brief to the PATENT TRIAL AND APPEALS BOARD (PTAB) on appeal from the decision of the Examiner of Group Art Unit 2456 dated January 25, 2018, finally rejecting all pending claims under 35 U.S.C. 103 (a) [hereinafter 'Action' or 'Final action'].

Real Party of Interest

The real party in interest is May Patents Ltd., the assignee of record.

Related Appeals and Interferences

Appellant assert that no other appeals, interferences or Judicial proceedings are known to the Appellant, the Appellant legal representative that will

directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

Status of Claims

Claims 1-30 are pending in the application, and are attached in Appendix A. The pending claims stand rejected in the Final Action dated January 25, 2018 under 35 U.S.C. §103(a).

Status of Amendments

No amendments have been made to the pending claims in response to the final Office Action dated January 25, 2018.

Summary of Claimed Subject Matter

[The referred paragraphs are the paragraphs in the parent application publication 2013/0201316].

Claim 1 discloses a method for operating an actuator (such as item 61a, 61b in Figure 6) in a controlled device (item 23a, 23b, or 23c in Figure 2, item 60 in Figure 5, paragraph 0370) in response to captured human voice data, for use with a client device (item 13a, 13b, or 13c in Figure 1, item 23a, 23b, or 23c in Figure 2, item 50 in Figure 5, paragraph 0289) in a building (such as item 189 in Figure 2) communicating over a wireless network (such as numerals 14a, 14b, or 22 in Figure 2 or Figure 24, paragraphs 0033, 0270, 0487) and an Internet-connected server device (item 24 in Figure 2, item 151 in figure 15, paragraphs 0270-0271) external to the building. The method comprises capturing (item 171 in Figure 17), by a microphone (such as 51a, 51b in Figure 5) in the client device, the human voice data; sending to the server, by the client device via the wireless network, the

captured human voice data; receiving (item 192 in Figure 19), by the server over the Internet, the captured human voice data; processing (item 192 in Figure 19), by the server, the captured human voice data; responsive to the processing, sending (item 175 in Figure 19) a message, by the server to the client over the Internet; receiving, by the controlled device via the wireless network, the message; and operating the actuator (paragraphs 0357, 0370) in the controlled device in response to the received message (item 150a in Figure 15a, item 170 in Figure 17, paragraphs 0052, 0128, 0131-0133, 0486).

Ground of Rejection to be Reviewed on Appeal

In the Action dated January 25, 2018, claims 1-30 are finally rejected under 35 U.S.C. 103(a).

Argument

Argument #1: Improper rejection format

The Action is vague and unclear since it provides no more than copied passages from the references. It is not clear how claimed elements or features are equated to elements or features in the references. Since the rejection is not made explicit (Examiner did not correlate claimed elements to elements in the prior art with a reference to figures or description), the Appellant cannot reasonably determine which element is believed to correspond to each of the claimed limitations and is forced to guess which features in the cited art the Examiner believed to disclose such claimed features.

It is submitted that "*A rejection must be set forth in sufficiently articulate and informative manner as to meet the notice requirement of § 132, such as by identifying where*

or how each limitation of the rejected claims is met by the prior art references." [In re Jung, 637 F.3d 1356, 1363 (Fed. Cir. 2011)]; see also 37 C.F.R. § 1.104(c)(2) ("*When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable.*"). Further, the" PTO must create a record that includes "specific fact findings for each contested limitation and satisfactory explanations for such findings."" [Gechter v. Davidson 116 F.3d 1454, 1460 (Fed. Cir. 1997)], and "*It is neither our place, nor Appellants*' burden, to speculate as to the basis for rejecting claims. Furthermore, the Supreme Court in KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 **should be made explicit.**(Emphasis added).

It is thus respectfully requested that if the rejection is affirmed, the application will be remanded for a clearer rejection.

Office Action, section 6 pages 3-5

Claims 1-30 are rejected under pre-AIA 35 U.S.C. 101 as being directed to a judicial exception.

Argument #2: The claims are patent eligible under §101

a. It is respectfully submitted that these claims are not directed to a judicial exception at least because the claim limitations include various tangible and physical activities, that cannot be considered as abstract. It is noted that none of the examples provided in the USPTO guidelines include signal processing (such as processing human voice) and affecting a physical phenomenon based on such analysis.

b. Claim 1 recites, *inter alia*, the limitations of :" … *receiving, by the controlled device via the wireless network, the message; and operating the actuator in the controlled device in response to the received message.*". The analysis in the Action is silent regarding to these limitations, and fails to show why these limitations are not patent eligible. It is submitted that these actions are clearly can not be characterized as "Abstract Idea".

c. The claims is characterized as 'Abstract Idea' since (top of page 4) it is "… *leaving nothing but a storage medium, processor and instructions remaining, which are part of* ***a general purpose computer.***" (Emphasis added). The Actions clearly refers to a SINGLE computer – However, the claim clearly defines THREE different computerized entities (controlled device, client device, and an Internet-connected server) that communicate over TWO networks: wireless network and the Internet. Hence, the Action mis-characterize the claimed invention, which is clearly an improvement rooted in computer networking technology and directed to solving a problem in the hardware / software / control arts.

d. In section 13 of the Action (top of page 25), the Examiner notes that "… *Beliles discloses a method and system for* ***dynamically responding*** *to network events, by* ***collecting monitored data from sensors*** *and* ***detecting network events / notification*** *and then responding accordingly,* ***which is analogous to the teaching of the applicant's specifications.***" (Emphasis added). Hence, it is admitted by the Office that the claimed invention is clearly more than ***'a general purpose computer'***, but also involves 'dynamic responding', 'collecting data from sensors', 'detecting network events', each of which is clearly NOT part of ***'a general purpose computer'***, and further clearly an improvement rooted in computer networking

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technology and directed to solving a problem in the hardware / software / control arts.

e. First, the Action overlook various steps in claim 1 and in the various dependent claims. Second, the Action equates 'capturing the human voice data' to '*obtaining and comparing intangible data*' – A human voice cannot be considered as 'intangible data' and capturing the voice by a microphone cannot be considered as '*obtaining and comparing*' in general, and '*obtaining and comparing intangible data*' in particular. Third, the Action equates 'processing by the server' to '*collecting and comparing known information*' – A human voice cannot be considered as '*known information*', and voice processing cannot be equated to any '*collecting and comparing*' in general, and '*collecting and comparing known information*' in particular. Further, the Action states that the invention relates to '*a storage medium, processor and instructions remaining, which are part of a general purpose computer*'. Such characterization overlooks the claimed structure of three different devices (controlled device, client device, and a server) communicating with each other in a defined way. Such a structure cannot be considered as '*general purpose computer*'.

f. The claims are clearly associated with particular types of devices - apparatus / device / system – hence relating to a tangible matter. By definition, tangible matter cannot be considered as 'abstract'. It is further submitted that according to the guidelines and the examples published in the USPTO guidelines after Alice for determining eligibility, no apparatus claim were found ineligible as 'abstract idea'. Hence, the §101 rejection should not apply, and the claims should be found patent eligible.

g. The Action states (bottom of page 3) that the step of 'capturing the human voice' is an 'Abstract Idea of Itself'

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based on "*(obtaining and comparing intangible data, CyberSource)*". However, while the CyberSource case involved handling business data that is indeed intangible data, the claimed invention involves capturing human voice data, which is clearly **tangible data relating to a physical entity.**

Office Action, section 7 pages 6-23

Claims 1-4, 6-14, 16 and 27-30 are rejected under pre-AIA 35 U.S.C. 103 as being unpatentable over Beliles *et al.* (US 2007/0283005 – hereinafter "Beliles"), in view of Buck *et al.* (US 2009/0089065 – hereinafter "Buck"), and in view of Urano *et al.* (US 2008/0307075 – hereinafter "Urano").

Regarding claim 1

Argument #3: The Beliles reference does not teach the recited features.

The Action relies upon the Beliles reference as a support for the claim 1 preamble stating: "*A method for operating an actuator in a controlled device in response to captured human voice data, for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building, …*", based on paragraphs 0004, 0009, and 0015-0017 of the Beliles reference. It is submitted that these cited paragraphs do not disclose or mention the recited limitations of 'Internet-connected server' and 'wireless network'.

Further, it is respectfully submitted that the Beliles reference is not in analogous field, and affectively teaches away from the claimed invention. The Beliles reference is based upon for the recited limitations of "*A method … for use with a client device in a building communicating over a*

wireless network and an Internet-connected server device external to the building, …". First, while this passage explicitly recites a wireless network, the Beliles reference focuses on a wired network, and the disclosure in general, and the cited paragraphs 0009, 0015-0017 in particular, are silent regarding any wireless networking. Thus, since the rejection is based on , as stated on top of page 8, on Beliles disclosing "… *method for use with client device in a building communicating over a wireless network and an Internet-connected server device external to the building,* … ***as disclosed by Beliles,*** *…",* the rejection cannot be sustained.

Second, the claimed invention recites, inter alia, an Internet-connected server that is **external to the building**, for processing the received microphone (sensor) data and in response controlling an actuator. The Beliles reference in general, and the cited paragraphs in particular, are silent regarding any device communicating over a wireless network to an 'Internet-connected server', and in particular any communication with any device external to the building. Further, the Beliles invention dictates that decisions to activate any actuator are based on a policy table 400 (see FIGs. 2 and 4) that is part of a network device **in the building.**

Argument #4: The Beliles reference teaches away from the claimed invention

The claimed invention recites operating an actuator in response to capturing human voice, hence referring to **intentional and deliberate actuator control by a human.** In contrast, the Beliles invention focuses on security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and

for detecting unwanted problems or disasters such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037).

Argument #5: Improper combination of the Beliles and Buck references.

a. The Action states in general that these references are in an analogous art. However, the Action fails to explain WHY the Beliles and the Buck references are analogous. In case that the Action suggests that these reference are analogous since they are in the same field, a clear definition of that field is respectfully requested.

b. The Appellant submits that the Beliles and Buck references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Action does not explain, as required by the rules, what is the reasoning behind the combining of the Beliles and Buck references, and why these references are analogous to each other.

Further, the rejection is conclusory and insufficient to provide any *prima facie* burden for a rejection. Further, Section 2143.01 of the MPEP states: "*The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness.*". Hence, the stated rationale cannot be considered as "objective evidence of non-obviousness" and fails to show "… **objective reason** to combine the teachings of the references."[MPEP 2143.01 (IV)](Emphasis added), and further by using facts gleaned from the claim or the specification, the Action fails to show a conclusion that is reached "… *on the basis of the facts* ***gleaned from the prior art.***" [MPEP 2142](Emphasis added).

Further, MPEP § 2145(X)(A)states that "*Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and* ***does not include knowledge gleaned only from applicant's disclosure,*** *such a reconstruction is proper, quoting In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971), (Emphasis added).*"

c. The Beliles and Buck references are non-analogous at least because the Beliles reference discloses a system **in a building** and the Buck reference discloses a system **in a vehicle.** Further, the Beliles reference teaches security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and **for detecting unwanted problems or disasters** such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037), **in a stationary environment in a building.** In contrast, the Buck reference teaches away from these features by teaching **'hands free'** (paragraph 0005) operation in a **moving vehicle.**

The above is further supported by the fact that Beliles is classified under U.S. Class 709/224 relating to 'ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MULTICOMPUTER DATA TRANSFERRING - COMPUTER NETWORK MANAGING' dealing with computer network management, while Buck is classified in Class/Subclass 704/275 associated with "DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION - Speech assisted network", relating to signal processing. Handling computer networks is clearly distinct from any speech processing. It is noted that MPEP §808.02(A) explicitly

recites that ***different classes*** "… ***shows that each invention has attained recognition in the art as a separate subject for inventive effort, and also a separate field of search.***" (Emphasis added). Furthermore, different classes were relied upon in a restriction requirement that was issued by the SAME Examiner in a parent application 13/733,634 dated October 6, 2016.

Further, according to the restriction requirement that was issued by the SAME Examiner in a parent application 13/733,634 dated October 6, 2016, a restriction was required between Invention group I that is drawn to "*a system for commanding an actuator operation in response to a sensor response*" and Invention group V that is drawn to "*vehicle control system*". The restriction requirement itself states on page 2 that these inventions "… **are not obvious variant**" (Emphasis added), hence, **these two features is patentably different**, and thus cannot be combined. Further, MPEP §806.04(h) explicitly recites that "***Species Must Be Patentably Distinct From Each Other***". It is improper to apply a 'double standard' to the legal term of 'not obvious' – one for restriction and one for §103 rejection. Hence, it is admitted by the Office that vehicle control, as stated in the rationale, is non-obvious to be added to other systems.

Argument #6: Improper rationale for combining the Beliles and Buck references.

The rationale for combining the Beliles and Buck references is stated on top of page 9 as: "… *for the purpose of implementing the techniques for adjustment of vehicle elements through speech control*". This rationale amounts to nothing more than an unsupported and unexplained conclusory statement, while the Office cannot rely solely on common

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knowledge or common sense to support its findings. Further, it is settled that the Office should provide a "satisfactory explanation" for the motivation for a finding that includes an express and **"rational" connection with the evidence presented.** Furthermore, MPEP 2143 clearly states that "*Any rationale employed must provide* ***a link between the factual findings and the legal conclusion of obviousness.***" (Emphasis added).

First, the primary reference that is modified by the Action is the Beliles reference. **However, the Beliles reference is NOT disclosing any vehicle or vehicle elements, and is NOT disclosing any speed or speed control, rendering the rationale as moot.**

Further, the Action is based on paragraph 0028 of the Buck reference, which is not related and does not mention any speed in general, and speed control in particular. Furthermore, it is not clear, and technically incorrect, that adding an actuator that is voice controlled results in, or supports, any "*adjustment of vehicle elements through speech control*", as suggested by the stated rationale.

Argument #7: Improper combination of the Beliles and Urano references.

a. The Action states in general that these references are in an analogous art. However, the Action fails to explain WHY the Beliles and the Buck references are analogous. In case that the Action suggests that these reference are analogous since they are in the same field, a clear definition of that field is respectfully requested.

b. The Appellant submits that the Beliles and Buck references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically

be combined. The Action does not explain, as required by the rules, what is the reasoning behind the combining of the Beliles and Buck references, and why these references are analogous to each other.

Further, the rejection is conclusory and insufficient to provide any *prima facie* burden for a rejection. Further, Section 2143.01 of the MPEP states: "*The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness*.". Hence, the stated rationale cannot be considered as "objective evidence of non-obviousness" and fails to show "… **objective reason** to combine the teachings of the references."[MPEP 2143.01 (IV)](Emphasis added), and further by using facts gleaned from the claim or the specification, the Action fails to show a conclusion that is reached "… *on the basis of the facts* ***gleaned from the prior art.***" [MPEP 2142](Emphasis added). Further, MPEP § 2145(X)(A)states that "*Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and* ***does not include knowledge gleaned only from applicant's disclosure,*** *such a reconstruction is proper, quoting In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971), (Emphasis added).*"

c. The Beliles and Urano references are non-analogous at least because the Beliles reference focuses on security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and **for detecting unwanted problems or disasters** such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037), **in a stationary environment in a**

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building. In contrast, the Urano reference in general, and the cited paragraphs 0101-0104 in particular, dictate devices that are **'worn by the respective person', hence portable and human operated.**

Further, according to the restriction requirement that was issued by the SAME Examiner in a parent application 13/733,634 dated October 6, 2016, a restriction was required between Invention group I that is drawn to "*a system for commanding an actuator operation in response to a sensor response*" and Invention group IV that is drawn to "*a control system for commanding an actuator operation in response to processing of voice*". The restriction requirement itself states on page 2 that these inventions "… **are not obvious variant**" (Emphasis added), hence, **these two features is patentably different**, and thus cannot be combined. Further, MPEP §806.04(h) explicitly recites that "***Species Must Be Patentably Distinct From Each Other***". It is improper to apply a 'double standard' to the legal term of 'not obvious' – one for restriction and one for §103 rejection. Hence, it is admitted by the Office that voice-based control, as stated in the rationale, is non-obvious to be added to other systems.

Argument #8: Improper rationale for combining the Beliles and Urano references.

The rationale for combining is stated on top of page 9 as: "… *for improved energy efficiency*". First, the primary reference that is modified by the Action is the Beliles reference. The Urano reference is combined with the Beliles reference for disclosing relating to capturing by a microphone of human voice data and sending the captured human voice data. These features are not relevant to any energy consumption in general, and to any "*improved energy efficiency*" as stated in

the rationale in particular, hence this rationale for combining these references is moot.

Further, the Action is based on paragraphs 0101-0104 of the Urano reference, which is not related and does not mention any powering or energy in general, and "*improved energy efficiency*" in particular. Furthermore, it is not clear, and technically incorrect, that adding components, such as microphone and sending captured voice to a server results in, or supports in any way, any "*improved energy efficiency*", as suggested by the stated rationale.

Hence, this rationale amounts to nothing more than an unsupported and unexplained conclusory statement, while the Office cannot rely solely on common knowledge or common sense to support its findings. Further, it is settled that the Office should provide a "satisfactory explanation" for the motivation for a finding that includes an express and **"rational" connection with the evidence presented.** Furthermore, MPEP 2143 clearly states that "*Any rationale employed must provide* ***a link between the factual findings and the legal conclusion of obviousness.***" (Emphasis added).

Regarding claim 2

Argument #9: No rationale provided for combining with Beliles

Claim 2 recites the limitation of "… *the controlled device is part of, integrated with, or the same as, the client device*.". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 3

Argument #10: No rationale provided for combining with Beliles

Claim 3 recites the limitation of "… *the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 4

Argument #11: No rationale provided for combining with Beliles

Claim 4 recites the limitations of "*a sensor that outputs sensor data that responds to a physical phenomenon*" and "*sending to the server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 6

Argument #12: No rationale provided for combining with Beliles

Claim 6 recites the limitations of "… *the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon.*". However, no rationale is

provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 8

Argument #13: No rationale provided for combining with Beliles

Claim 8 recites the limitations of "… *the client device comprises multiple microphones*" and "… *the capturing comprises capturing, by the multiple microphones in the client device, the human voice data*.". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Furthermore, the limitation of "… *the capturing comprises capturing, by the multiple microphones in the client device, the human voice data*." further defines the limitation of "… capturing, by a microphone in the client device, the human voice data …". As stated on page 8, the Action **relies upon the Urano reference** for this limitation, hence it is improper **to rely on the Buck reference** for the narrowing limitation in this claim.

Regarding claim 9

Argument #14: Improper characterization.

The applicant disagrees that this claim '… *does not teach or further define over the limitation in claim 8*' as stated in the rejection. Claim 9 recites that "… *the multiple microphones are arranged as a directional microphones array*

operative to estimate a number, magnitude, frequency, Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array.”. Such usage of the multiple microphones is technically non-obvious and patentable.

It is submitted that this limitation is not found in the applied references, and are patentable distinctions over the prior art. Further, it is noted that according to MPEP: “*All Claim Limitations Must Be Considered*” (MPEP 2143.03), and that “*All words in a claim must be considered in judging the patentability of that claim against the prior art.*” In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494,496 (CCPA 1970).

Regarding claim 13

Argument #15: No rationale provided for combining with Beliles

Claim 13 recites the limitations of “… *the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005 standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, or Z-Wave™ standards.*”. However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. In particular, it is not clear why the wireless network relied upon of the Beliles reference is a WPAN one. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 16

Argument #16: No rationale provided for combining with Beliles

Claim 16 recites the limitations of "… *the wireless network is a cellular telephone network that is a Third Generation (3G) network that uses UMTS W-CDMA, UMTS HSPA, UMTS TDD, CDMA2000 1xRTT, CDMA2000 EV-DO, or GSM EDGE-Evolution, and wherein the cellular telephone network is a Fourth Generation (4G) network that uses HSPA+, Mobile WiMAX, LTE, LTE-Advanced, MBWA, or is based on IEEE 802.20-2008.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. In particular, it is not clear why the wireless network relied upon of the Beliles reference is a cellular one. The rationale stated in claim 1 is not relevant to this claim, and relates to combination of other non-relevant elements.

Regarding claim 28

Argument #17: No rationale provided for combining with Beliles

Claim 28 recites the limitations of "… *the actuator is a sounder for converting an electrical energy to omnidirectional, unidirectional, or bidirectional pattern emitted, audible or inaudible, sound waves.*". However, no rationale is provided in the Action for combining these features, even if taught by the Buck reference, to the Beliles reference. In particular, the rationale for combining the Beliles and Buck references is stated on top of page 9 as: "… *for the purpose of implementing the techniques for adjustment of vehicle elements through speech control*", and a sounding by a sounder cannot be considered as '*adjustment of vehicle elements*'.

Office Action, section 8 pages 15-17

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Claims 5 and 15 are rejected under pre-AIA 35 U.S.C. 103 as being unpatentable over Beliles *et al.* (US 2007/0283005 – hereinafter "Beliles"), in view of Buck *et al.* (US 2009/0089065 – hereinafter "Buck"), in view of Urano *et al.* (US 2008/0307075 – hereinafter "Urano"), and further in view of Gelvin *et al.* (US 2015/0046582 – hereinafter "Gelvin").

Regarding claims 5, 15

Argument #18: Improper combination of the Beliles and Urano references.

a. The Action does not state Why the Beliles and the Buck references are combines, or WHY they are in an analogous art, as required by the rules. In case that the Action suggests that these reference are analogous since they are in the same field, a clear definition of that field is respectfully requested.

b. The Appellant submits that the Beliles and Gelvin references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Action does not explain, as required by the rules, what is the reasoning behind the combining of the Beliles and Gelvin references, and why these references are analogous to each other.

Further, the rejection is conclusory and insufficient to provide any *prima facie* burden for a rejection. Further, Section 2143.01 of the MPEP states: "*The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness.*". Hence, the stated rationale cannot be considered as "objective evidence of non-obviousness" and fails to show "… **objective reason** to

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combine the teachings of the references."[MPEP 2143.01 (IV)](Emphasis added), and further by using facts gleaned from the claim or the specification, the Action fails to show a conclusion that is reached "… *on the basis of the facts* ***gleaned from the prior art.***" [MPEP 2142](Emphasis added). Further, MPEP § 2145(X)(A)states that "*Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and* ***does not include knowledge gleaned only from applicant's disclosure,*** *such a reconstruction is proper, quoting In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971), (Emphasis added).*"

c. The Beliles and Gelvin references are non-analogous art involving two different fields. The Beliles reference, as admitted by the Action itself, is in the field of computer networks in a building environment (see e.g., paragraphs 0004-0006). In contrast, the Gelvin reference is directed to a vehicular environment. According to a restriction requirement in this application dated October 6, 2016, on page 2, invention group V '*drawn to a vehicular control system*' is a different invention that is '***not obvious variant***'(Emphasis added) of the other inventions, such as invention group I pertaining to claim 1. Hence, **these two features is patentably different**, and thus cannot be combined. Further, MPEP §806.04(h) explicitly recites that "***Species Must Be Patentably Distinct From Each Other***". Furthermore, the restriction requirement in this application dated October 6, 2016, on page 10, defined the subject matter of claims 104-108 as different species BG.

Argument #19: Improper rationale for combining the Beliles and Abe references

The rationale for combining is stated on page 17 as: "… *for the purpose of implementing a distributed network and Internet access to sensors, controls, and processors* …". However, in the rejection of claim 1 in page 6 of the Action, the Action states that the Beliles reference discloses "*A method for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building,* …". Hence according to Action itself, this rationale for combining is already found in the Beliles reference, thus there is no motivation for such combining, and since the Office admits that the primary reference (Beliles) already had the capabilities that the secondary reference (Gelvin) provided with its added disclosures, no obviousness may be sustained. (*In Square, Inc. v. Cooper, IPR2014-00158, Paper No. 8, at 30 (15 May 2014)*). Further, it is not be appropriate to base this rejection on a combination of these references because the systems in Beliles and Gelvin are each self-contained and independently operate effectively:

> *Because each device independently operates effectively, a person having ordinary skill in the art, who was merely seeking to create a better device to drain fluids from a wound, would have no reason to combine the features of both devices into a single device.*

Kinetic Concepts v. Smith and Nephew, 688 F.3d 1342, at 1369 (CAFC, 2012).

Further, claim 5 further defines various sensors, such as a thermoelectric sensor or a photoelectric sensor. The stated rationale for combining is not relevant to these limitations: The type of sensors is not relevant to any 'implementation of a distributed network'.

Regarding claim 15

Argument #20: No rationale provided for combining with Beliles

Claim 15 recites the limitations of "… *the wireless network uses a wireless communication over a licensed or an unlicensed radio frequency band, that is an Industrial, Scientific and Medical (ISM) radio band.*". However, no rationale is provided in the Action for combining these features, even if taught by the Gelvin reference, to the Beliles reference. In particular, it is not clear why the wireless network relied upon of the Beliles reference is according to the claim. The rationale stated for claim 5 is not relevant to this claim, and relates to combination of other non-relevant elements.

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Conclusion

In conclusion, the rejection of claims 1-30 under 35 U.S.C. 103(a) should be cancelled, resulting allowance of the all pending claims. Attached hereto is an Appendix containing a copy of the claims involved in this appeal.

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Appendix A – Pending claims

1. A method for operating an actuator in a controlled device in response to captured human voice data, for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building, the method comprising:

capturing, by a microphone in the client device, the human voice data;

sending to the server, by the client device via the wireless network, the captured human voice data;

receiving, by the server over the Internet, the captured human voice data;

processing, by the server, the captured human voice data;

responsive to the processing, sending a message, by the server to the client over the Internet;

receiving, by the controlled device via the wireless network, the message; and

operating the actuator in the controlled device in response to the received message.

2. The method according to claim 1, wherein the controlled device is part of, integrated with, or the same as, the client device.

3. The method according to claim 1, wherein the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person.

4. The method according to claim 1, wherein the client device further comprises a sensor that outputs sensor data that responds to a physical phenomenon, wherein the method further comprising sending to the server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data.

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5. The method according to claim 4, wherein the sensor is a thermoelectric sensor that responds to a temperature or to a temperature gradient of an object using conduction, convection, or radiation, wherein the sensor is a photoelectric sensor that responds to a visible or an invisible light, the invisible light is infrared, ultraviolet, X-rays, or gamma rays, wherein the photoelectric sensor is based on the photoelectric or photovoltaic effect, and comprises a semiconductor component that comprises a photodiode, a phototransistor, or a solar cell, or wherein the photoelectric sensor is based on Charge-Coupled Device (CCD) or a Complementary Metal-Oxide Semiconductor (CMOS) element.

6. The method according to claim 1, wherein the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon.

7. The method according to claim 6, wherein the physical phenomenon comprises temperature, humidity, pressure, audio, vibration, light, motion, sound, proximity, flow rate, electrical voltage, or electrical current.

8. The method according to claim 1, wherein the client device comprises multiple microphones, and wherein the capturing comprises capturing, by the multiple microphones in the client device, the human voice data.

9. The method according to claim 8, wherein the multiple microphones are arranged as a directional microphones array operative to estimate a number, magnitude, frequency, Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array.

10. The method according to claim 1, wherein the microphone is an omnidirectional, unidirectional, or bidirectional microphone that is based on the sensing an incident sound based motion of a diaphragm or a ribbon, or wherein the

microphone comprises a condenser, an electret, a dynamic, a ribbon, a carbon, or a piezoelectric microphone.

11. The method according to claim 1, wherein the client device or the controlled device are addressable in the wireless network or the Internet using distinct locally administered addresses or a universally administered digital addresses stored in a volatile or non-volatile memory of the respective device and uniquely identifying the respective device in the network.

12. The method according to claim 11, wherein the digital address is a MAC layer address that is MAC-48, EUI-48, or EUI-64 address type or wherein the digital address is a layer 3 address and is static or dynamic IP address that is IPv4 or IPv6 type address.

13. The method according to claim 1, wherein the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005 standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, or Z-Wave™ standards.

14. The method according to claim 1, wherein the wireless network is a Wireless LAN (WLAN) that is according to, or base on, IEEE 802.11-2012, IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, or IEEE 802.11ac.

15. The method according to claim 1, wherein the wireless network uses a wireless communication over a licensed or an unlicensed radio frequency band, that is an Industrial, Scientific and Medical (ISM) radio band.

16. The method according to claim 1, wherein the wireless network is a cellular telephone network that is a Third Generation (3G) network that uses UMTS W-CDMA, UMTS HSPA, UMTS TDD, CDMA2000 1xRTT, CDMA2000 EV-DO, or GSM EDGE-Evolution,

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and wherein the cellular telephone network is a Fourth Generation (4G) network that uses HSPA+, Mobile WiMAX, LTE, LTE-Advanced, MBWA, or is based on IEEE 802.20-2008.

17. The method according to claim 1, wherein the client device or the controlled device is integrated in, is part of, or is entirely included in, an appliance.

18. The method according to claim 17, wherein the primary functionality of the appliance is associated with food storage, handling, or preparation.

19. The method according to claim 18, wherein the primary function of the appliance is heating food, and wherein the appliance is a microwave oven, an electric mixer, a stove, an oven, or an induction cooker.

20. The method according to claim 18, wherein the appliance is a refrigerator, a freezer, a food processor, a dishwashers, a food blender, a beverage maker, a coffeemaker, or an iced-tea maker.

21. The method according to claim 17, wherein the primary function of the appliance is associated with environmental control, and the appliance is part of, an HVAC system.

22. The method according to claim 21, wherein the primary function of the appliance is associated with temperature control, and wherein the appliance is an air conditioner or a heater.

23. The method according to claim 17, wherein the primary function of the appliance is associated with cleaning, wherein the appliance primary function is associated with clothes cleaning and the appliance is a washing machine or a clothes dryer, or wherein the appliance is a vacuum cleaner.

24. The method according to claim 17, wherein the appliance is an answering machine, a telephone set, a home cinema system, a HiFi system, a CD or DVD player, an electric furnace, a trash

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compactor, a smoke detector, a light fixture, or a dehumidifier.

25. The method according to claim 1, wherein the actuator is an electric light source for converting electrical energy into light that emits visible or non-visible light for illumination or indication, and the non-visible light is infrared, ultraviolet, X-rays, or gamma rays.

26. The method according to claim 25, wherein the electric light source comprises, a lamp, an incandescent lamp, a gas discharge lamp, a fluorescent lamp, a Solid-State Lighting (SSL), a Light Emitting Diode (LED), an Organic LED (OLED), a polymer LED (PLED), or a laser diode.

27. The method according to claim 1, wherein the actuator is a motion actuator that causes linear or rotary motion.

28. The method according to claim 1, wherein the actuator is a sounder for converting an electrical energy to omnidirectional, unidirectional, or bidirectional pattern emitted, audible or inaudible, sound waves.

29. The method according to claim 28, wherein the sounder comprises an electromagnetic loudspeaker, a piezoelectric speaker, an electrostatic loudspeaker (ESL), a ribbon or planar magnetic loudspeaker, or a bending wave loudspeaker, or wherein the sounder comprises an electric bell, a buzzer (or beeper), a chime, a whistle or a ringer.

30. The method according to claim 28, wherein the operating of the actuator comprises playing digital audio content that is pre-recorded or synthesized, or wherein the operating of the actuator comprises simulating the voice of a human being or generating music, or wherein the operating of the actuator comprises sounding a syllable, a word, a phrase, a sentence, a short story, or a long story, using male or female voice.

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Electronic Patent Application Fee Transmittal

Application Number:	15657163
Filing Date:	23-Jul-2017
Title of Invention:	SYSTEM AND METHOD FOR SERVER-BASED CONTROL
First Named Inventor/Applicant Name:	Yehuda BINDER
Filer:	Yehuda Binder
Attorney Docket Number:	BINDER-014-US3

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
NOTICE OF APPEAL	2401	1	400	400
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**400**

Electronic Acknowledgement Receipt	
EFS ID:	31695284
Application Number:	15657163
International Application Number:	
Confirmation Number:	1088
Title of Invention:	SYSTEM AND METHOD FOR SERVER-BASED CONTROL
First Named Inventor/Applicant Name:	Yehuda BINDER
Customer Number:	131926
Filer:	Yehuda Binder
Filer Authorized By:	
Attorney Docket Number:	BINDER-014-US3
Receipt Date:	05-FEB-2018
Filing Date:	23-JUL-2017
Time Stamp:	09:02:39
Application Type:	Utility under 35 USC 111(a)

Payment information:

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Payment Type	DA
Payment was successfully received in RAM	$400
RAM confirmation Number	020518INTEFSW00008822506726
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Notice of Appeal Filed	aia0031.pdf	236654 e39f4ffe55588374373a425a8ce172b7078155a5	no	2
Warnings:					
Information:					
2	Appeal Brief Filed	Appeal-Brief-2-18.pdf	305940 c9af46968cc31c74238952a4e456945cf6001fbb	no	29
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	29865 ba851ea2762eea0997727b2e04a87360547dff7b	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	572459		

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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.

PTO/AIA/31 (03-14)
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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.

NOTICE OF APPEAL FROM THE EXAMINER TO THE PATENT TRIAL AND APPEAL BOARD

Docket Number (Optional): BINDER-014-US3

I hereby certify that this correspondence is being facsimile transmitted to the USPTO, EFS-Web transmitted to the USPTO, or deposited with the United States Postal Service with sufficient postage in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, on Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on 2018-02-05.

Signature /Yehuda Binder/

Typed or printed name Yehuda Binder

In re Application of: Yehuda BINDER

Application Number	Filed
15/657,163	July 23, 2017

For: SYSTEM AND METHOD FOR SERVER BASED CONTROL

Art Unit	Examiner
2456	KHAN, HASSAN ABDUR-RAHMAN

Applicant hereby **appeals** to the Patent Trial and Appeal Board from the last decision of the examiner.

The fee for this Notice of Appeal is (37 CFR 41.20(b)(1)) $ _____

☑ Applicant asserts small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by 50%, and the resulting fee is: $ 400.00

☐ Applicant certifies micro entity status. See 37 CFR 1.29. Therefore, the fee shown above is reduced by 75%, and the resulting fee is: $ _____
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☑ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 506726.

☐ Payment made via EFS-Web.

☐ A petition for an extension of time under 37 CFR 1.136(a) (PTO/AIA/22 or equivalent) is enclosed.
For extensions of time in reexamination proceedings, see 37 CFR 1.550.

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

☐ applicant

☑ attorney or agent of record
Registration number 73612

☐ attorney or agent acting under 37 CFR 1.34
Registration number _____

Signature /Yehuda Binder/

Typed or printed name Yehuda Binder

Telephone Number -972-544444577

Date 2018-02-05

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☐ * Total of _____ forms are submitted.

This collection of information is required by 37 CFR 41.20(b)(1) and 41.31. 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, 1.14 and 41.6. 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.

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The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/657,163	07/23/2017	Yehuda BINDER	BINDER-014-US3	1088

131926 7590 01/25/2018

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EXAMINER	
KHAN, HASSAN ABDUR-RAHMAN	

ART UNIT	PAPER NUMBER
2456	

MAIL DATE	DELIVERY MODE
01/25/2018	PAPER

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

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 15/657,163	Applicant(s) BINDER ET AL.	
	Examiner HASSAN KHAN	Art Unit 2456	AIA (First Inventor to File) Status No

-- 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* MONTHS 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 *10/17/2017*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

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

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ 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*

5)☒ Claim(s) *1-30* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-30* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

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

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

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

11)☐ 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).

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).

Certified copies:

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)).

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

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/29/2017*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

2. This application is a continuation of 13/733,634 filed on 01/03/2013.

3. Claims 4, 5, 10, 16, 17, 21 and 26 have been amended.

4. Claims 1 - 30 have been examined and are pending.

Information Disclosure Statement

5. The five information disclosure statements (IDS) submitted on 07/23/2017, sixth IDS submitted on 08/17/2017 and the seventh information disclosure statement (IDS) submitted on 11/29/2017 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements has not been considered by the examiner in detail since it is impractical for the examiner to review the references thoroughly with the number of references cited in the case. By initialing each of the cited references on the accompanying 1449 forms, the examiner is merely acknowledging the submission of the cited references and merely indicating that only a cursory review is made of the cited references.

An applicant's duty of disclosure of material and information is not satisfied by presenting a patent examiner with "a mountain of largely irrelevant [material] from which he is presumed to have been able, with his expertise and with adequate time, to have found the critical [material]. It ignores the real world conditions under which examiners work." Rohm & Haas Co. v. Crystal Chemical Co., 722 F.2d 1556, 1573 [220 USPQ 289] (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) (Emphasis in original). Patent applicant has a duty not just to (disclose pertinent prior art references but to make a disclosure in such way as not to "bury" it within other disclosures of less relevant prior art; See Golden Valley Microwave Foods Inc. v. Weaver Popcorn Co. Inc., 24 USPQ2d 1801 (N.D Ind. 1992); Molins PLC v. Textron Inc., 26 USPQ2d 1889, at 1899 (D.Del. 1992); Penn Yan Boats, Inc. v. Sea Lark Boats, Inc. et al., 175 USPQ 260, at 272 (S.D. Fl- 1972).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claims 1 - 30** are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

Subject Matter Eligibility Standard

When considering subject matter eligibility under 35 U.S.C. 101, it must be determined whether the claim is directed to one of the four statutory categories of invention, i.e., process, machine, manufacture, or composition of matter. If the claim does fall within one of the statutory categories, it must then be determined whether the claim is directed to a judicial exception (i.e., law of nature, natural phenomenon, and abstract idea), and if so, it must additionally be determined whether the claim is a patent-eligible application of the exception. If an abstract idea is present in the claim, any element or combination of elements in the claim must be sufficient to ensure that the claim amounts to significantly more than the abstract idea itself. Examples of abstract ideas include fundamental economic practices; mathematical concepts and relationships such as mathematical formulas, and calculations; certain methods of organizing human activities; and an idea itself, such as obtaining and comparing intangible data, comparing new and stored information, and an idea standing alone such as an un-instantiated concept, plan or scheme; Alice Corporation Pty. Ltd. v. CLS Bank International, et al. 573 U.S. 2014.

Analysis

In the instant case, Claims 1 - 30 are directed to a method. Additionally, the claims are directed to a method for operating an actuator in a controlled device in response to captured human voice data. The steps include capturing the human voice data (*obtaining and comparing intangible data, CyberSource),*

processing by the server, the captured human voice data *(collecting and comparing known information, Classen)* and responsive to the processing, sending a message *(collecting information, analyzing it and notifying a user, FairWarning),* all of which is considered to be an abstract idea of itself as the entire activity is about voice recognition and voice based controls. All the claim limitations are in its entirety makes up he abstract idea, leaving nothing but a storage medium, processor and instructions remaining, which are part of a general purpose computer, and therefore do not amount to significantly more than the abstract idea itself. The invention lacks any patentable material rather it does something which is already well-known in the art, and that is collecting and comparing known information (capturing human voice) and using rules to identify options (i.e. to recognize the human voice command(s) and to execute the associated tasks). The elements of the instant process, when taken alone, each execute in a manner routinely and conventionally expected of these elements. The elements of the product, when taken in combination, together do not offer substantially more than the sum of the functions of the elements when each is taken alone. That is, the elements involved in the recited method undertake their roles in performance of their activities according to their generic functionalities. The elements together execute in routinely and conventionally accepted coordinated manners and interact with their partner elements to achieve an overall outcome which, similarly, is merely the combined and coordinated execution of generic computer functionalities which are well-understood, routine and conventional activities previously known to the industry.

Conclusion

The claims do not amount to significantly more than the abstract idea itself. This is because the claims do not affect an improvement to another technology or technical field; the claims do not amount to an improvement to the functioning of a general purpose communication system itself; and the claim does not move beyond explaining the use of an abstract idea (already known to those skilled in the art) to a particular technological environment. Accordingly, the Examiner concludes that there are no meaningful limitations in the claim that transform the judicial exception into a patent eligible application such that the

claim amounts to significantly more than the judicial exception itself. Note: The analysis above applies to all statutory categories of invention.

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 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 negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims the examiner presumes that the subject matter of the various claims was commonly owned as of the effective filing date of the claimed invention(s) absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and effective filing dates of each claim that was not commonly owned as of the effective filing date of the later invention in order for the examiner to consider the applicability of 35 U.S.C. 102(b)(2)(C) for any potential 35 U.S.C. 102(a)(2) prior art against the later invention.

7. Claims 1 - 4, 6 – 14, 16 and 27 - 30 are rejected under 35 U.S.C. 103 as being unpatentable over US Patent Application Publication No. 2007/0283005 to Beliles et al. (hereinafter Beliles), in view of US Patent Application Publication No. 2009/0089065 to Buck et al. (hereinafter Buck) and in view of US Patent Application Publication No. 2008/0307075 to Urano et al. (hereinafter Urano).

Regarding Claim 1, Beliles discloses (in ¶0004) a method and system for dynamically responding to non-network events at a network device in a computer network that further includes:

a method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising; Beliles discloses (in ¶0015) one or more sensors automatically detect (sense) one or more non-network events, and notifications of the non-network events are then transmitted over the network. Beliles discloses (in ¶0009 and ¶0016) that the sensors, or notably network-attached sensor translators, transmit the notification of the non-network event (e.g., as data packets/frames) on the network to one or more destination devices, such as a central monitoring system and/or control center (e.g. a proprietary alarm system, security center etc.). The physical sensors offer the capability to attach to computer networks for communication purposes. For instance, rather than providing a set of system-specific or proprietary communication lines within a building, many physical sensor systems are connected to the computer network already in place. The monitoring/control system may then dynamically respond to the physical (non-network) events, or a system administrator may manually respond. The network device may notify a network-attached physical control device control one or more physical parameters, for example, to protect the network device itself (as well as people), such as, e.g., initiating a fire suppression system at the network device, possibly prior to a fire being detected (i.e., preemptively) at the network device is (in ¶0017).

Beliles does not explicitly discloses operating an actuator in a controlled device in response to captured human voice data, capturing, by a microphone in the client device, the human voice data; sending to the server, by the client device via the wireless network, the captured human voice data, receiving, by the server over the Internet, the captured human voice data; processing, by the server, the

captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message. However, in an analogous art, Buck teaches:

operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data; processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message; Buck teaches (in ¶0028) a system may include a device that converts spoken words into recognizable commands. The speech recognition device 402 may interface a controller 404 such as a real-time controller that may react to events before the events become obsolete (e.g., an avoidance controller may process multiple inputs, detect risk, and provide alerts while there is still time for a user to react). In response to control signals, an actuator 406 may perform an action such as transmitting an output signal. One or more tangible or wireless vehicle buses 408 (that may interface a wireless service provider) may convey the control signals and/or actuator signals to one or more local or remote (e.g., out-of-vehicle) destinations. The speech recognition device may interpret the continuous or interrupted flow of sound that may comprise speech in real time. When a first code phrase is processed, some speech recognition controllers 404 generate and store a data file in a local or remote memory 410. When a second code phrase is recognized, the system may monitor the tangible or virtual vehicle bus 408 and store the adjustment of one or more vehicle elements read from the vehicle bus in the data file that may be retained in a local (e.g., in-vehicle) or remote (e.g., out-of-vehicle) memory 410. When a third code phrase is recognized for the first time, the data file may be tagged. In some systems, the content of the data file may be contained or nested between the tags and any attributes the tags may have. In other systems, the tag may comprise an identifier, characters, or one or more pointers that identify the address of the data file or means to implement the desired operation. When the third code phrase is articulated, the phrase may be translated into executable commands by the system that may access and actuate one

or more operations that may occur when the data file is processed. The operation may adjust or activate any vehicle related system such as the position of one or more seats, one or more mirrors, or communicate or program one or more powertrain, chassis, climate, entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc.).

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising, as disclosed by Beliles, and a method for operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data; processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message, as taught by Buck, for the purpose of implementing the techniques for adjustment of vehicle elements through speech control (Buck, ¶0003).

Beliles in view of Buck does not explicitly disclose capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data. However, in an analogous art, Urano teaches:

capturing, by a microphone in the client device, the human voice data; sending to the server, by the client device via the wireless network, the captured human voice data; Urano teaches (¶0101 - ¶0104) that the microphone detects the voice around the sensor node. These sensor nodes are each worn by the respective person: for example, the sensor node is worn by the person A, the sensor node by the person B, and so on (Fig. 19C). Each sensor node performs sensing by sensors all the time (or repeatedly at a short interval). Then each sensor node transmits the obtained data (sensing data) via the wireless communication at a given interval.

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising and a method for

operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data, processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message, as disclosed by Beliles in view of Buck, and capturing, by a microphone in the client device, the human voice data; sending to the server, by the client device via the wireless network, the captured human voice data, as taught by Urano, for the purpose of implementing the system using sensor nodes for improved energy efficiency (Urano, ¶0012).

Regarding Claim 2, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the controlled device is part of, integrated with, or the same as, the client device; Buck teaches (in ¶0028) that the controlled device (speech recognition device 402 with a controller 404 and an actuator 406) converts spoken words into recognizable commands and transmits the control signals to a local integrated device or to a remote (e.g., out of vehicle) destination.

Regarding Claim 3, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person; Buck teaches (in ¶0020 and ¶0036) speech recognition software (i.e. an algorithm) that the speech recognition and control process may differentiate different users (e.g., multiple users) by analyzing the speech input and detect authorizations.

Regarding Claim 4, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the client device further comprises a sensor that outputs sensor data that responds to a physical phenomenon, wherein the method further comprising sending to the

server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data; Buck teaches (in ¶0028) a device that converts spoken words into recognizable commands. The speech recognition device 402 may interface a controller 404 such as a real-time controller that may react to events (e.g., an avoidance controller may process multiple inputs, detect risk, and provide alerts while there is still time for a user to react). In response to control signals, an actuator 406 may perform an action such as transmitting an output signal. One or more tangible or wireless vehicle buses 408 (that may interface a wireless service provider) may convey the control signals and/or actuator signals to one or more local or remote (e.g., out-of-vehicle) destinations. The speech recognition device may interpret the continuous or interrupted flow of sound that may comprise speech in real time.

Regarding Claim 6, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon; Buck teaches (in ¶0032) that the speech recognition and control process may interface a physical or a wireless bus system that interfaces in-vehicle and/or out-vehicle devices and networks. The devices may provide electronic and/or mechanical adjustments (e.g., through actuators, servo-motors, sensor thresholds, visual/aural setting, etc.) that may be used to adjust mechanical (i.e. physical) and/or electronic elements and devices.

Regarding Claim 7, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 6. Further, Buck discloses:

wherein the physical phenomenon comprises temperature, humidity, pressure, audio, vibration, light, motion, sound, proximity, flow rate, electrical voltage, or electrical current; Buck teaches (in ¶0032) that the speech recognition and control process may interface a physical or a wireless bus system that interfaces in-vehicle and/or out-vehicle devices and networks. Buck teaches (in ¶0028) when the third code phrase is articulated, the phrase may be translated into executable commands by the

system that may access and actuate one or more operations that may occur when the data file is processed. The operation may adjust or activate any vehicle related system such as the position of one or more seats, one or more mirrors, or communicate or program one or more powertrain, chassis, climate, entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc.). In other processes, the operation may tune a pass band of a bandwidth filter (e.g., select an audio channel), adjust a volume level, a treble setting, a bass setting, a balance control, and/or other aural settings.

Regarding Claim 8, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the client device comprises multiple microphones, and wherein the capturing comprises capturing, by the multiple microphones in the client device, the human voice data; Buck teaches (in ¶0031) some systems interface one or more microphones or a microphone array that includes two or more directional microphones (e.g., multiple directional microphones).

Regarding Claim 9, does not teach or further define over the limitation in claim 8 respectively. Therefore claim 9 is rejected for the same rationale of rejection as set forth in claim 8.

Regarding Claim 10, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck and Urano discloses:

wherein the microphone is an omnidirectional, unidirectional, or bidirectional microphone; Buck teaches (in ¶0031) some systems interface one or more microphones or a microphone array that includes two or more directional microphones (e.g., multiple directional microphones).

that is based on the sensing an incident sound based motion of a diaphragm or a ribbon, or wherein the microphone comprises a condenser, an electret, a dynamic, a ribbon, a carbon, or a piezoelectric microphone; Urano teaches (in ¶0101) that microphone detects the voice around the sensor node. Examiner notes that different types of microphones are commonly known to person skilled

in the art. These microphones uses different methods to convert the air pressure variations of a sound wave to an electrical signal (e.g. dynamic, condenser, piezoelectric etc.)

Regarding Claim 11, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Beliles discloses:

wherein the client device or the controlled device are addressable in the wireless network or the Internet using distinct locally administered addresses or a universally administered digital addresses stored in a volatile or non-volatile memory of the respective device and uniquely identifying the respective device in the network; Beliles teaches (in ¶0035 - ¶0039) that the network device may be a destination device of the notification message 300 (i.e., in destination address field 314), in that the sensors/translators may be configured to send the non-network event notification messages. The message 300 includes one or more headers 310 (e.g., IP/ATM headers, etc.), and a data field 320. Source address 312 and destination address 314 within the header 310 are the network addresses for the sending device (e.g., sensor translators) and the receiving device (e.g., a monitor/control system 140), respectively.

Regarding Claim 13, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, orZ-Wave™ standards; Buck teaches (in ¶0052) that the speech recognition controller may be compliant with a Wi-Fi protocols or multiple protocols or subsets (e.g., ZigBee, High Speed Packet Access (e.g., High Speed Downlink Packet Access and/or High Speed Uplink Packet Access), Bluetooth, Mobile-Fi, Ultrawideband, Wi-Fi, WiMax, mobile WiMax, cellular, satellite, etc., referred to as the transceiver protocols) that may be automatically detected and selected (through a handshaking, for example, that

may automatically determine the source type of the transmission e.g., by a query for example, and may attempt to match it) and may enable this automatic access through one or more communication nodes.

Regarding Claim 16, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the wireless network is a cellular telephone network, that is a Third Generation (3G) network that uses UMTS W-CDMA, UMTS HSPA, UMTS TDD, CDMA2000 lxRTT, CDMA2000 EV-DO, or GSM EDGE-Evolution, and wherein the cellular telephone network is a Fourth Generation (4G) network that uses HSPA+, Mobile WiMAX, LTE, LTE-Advanced, MBWA, or is based on IEEE 802.20-2008; Buck teaches (in ¶0052) a cellular or wireless protocol, a wireless or cellular telephone, a radio, a satellite, or other wireless communication system may link the speech recognition controller 404 transceivers 414 to a privately accessible or publicly accessible distributed network or directly to an intermediate surrogate. The system may be complaint with WiMax or IEEE 802.16a or may have a frequency band within a range of about 2 to about 11 GHz, a range of about 31 miles, and a data transfer rate of about 70 Mbps. In other applications, the speech recognition controller may be compliant with a Wi-Fi protocols or multiple protocols or subsets (e.g., ZigBee, High Speed Packet Access (e.g., High Speed Downlink Packet Access and/or High Speed Uplink Packet Access), Bluetooth, Mobile-Fi, Ultrawideband, Wi-Fi, WiMax, mobile WiMax, cellular, satellite, etc., referred to as the transceiver protocols) that may be automatically detected and selected and may enable this automatic access through one or more communication nodes.

Regarding Claim 27, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck teaches:

wherein the actuator is a motion actuator that causes linear or rotary motion; Buck teaches (¶0028) that the speech command may access and actuate one or more operations that may occur when the data file is processed. The operation may adjust or activate any vehicle related system such as the position of one or more seats (i.e. mechanically moving the seat), one or more mirrors (i.e. mechanically

moving the mirrors) or communicate or program one or more powertrain, chassis, climate, entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc.).

Regarding Claim 28, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck teaches:

wherein the actuator is a sounder for converting an electrical energy to omnidirectional, unidirectional, or bidirectional pattern emitted, audible or inaudible, sound waves; Buck teaches (¶0028) that the speech command may access and actuate one or more operations that may occur when the data file is processed. The operation may adjust or activate any vehicle related system such as entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc. The operation may tune a pass band of a bandwidth filter (e.g., select an audio channel), adjust a volume level, a treble setting, a bass setting, a balance control, and/or other aural settings.

Regarding Claim 29, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 28. Further, Buck teaches:

wherein the sounder comprises an electromagnetic loudspeaker, a piezoelectric speaker, an electrostatic loudspeaker (ESL), a ribbon or planar magnetic loudspeaker, or a bending wave loudspeaker, or wherein the sounder comprises an electric bell, a buzzer (or beeper), a chime, a whistle or a ringer; Buck teaches (¶0028) that the speech command may access and actuate one or more operations that may occur when the data file is processed. The operation may adjust or activate any vehicle related system such as entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc. The operation may tune a pass band of a bandwidth filter (e.g., select an audio channel), adjust a volume level, a treble setting, a bass setting, a balance control, and/or other aural settings.

Regarding Claim 30, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 28. Further, Buck teaches:

wherein the operating of the actuator comprises playing digital audio content that is pre-recorded or synthesized, or wherein the operating of the actuator comprises simulating the voice of a human being or generating music, or wherein the operating of the actuator comprises sounding a syllable, a word, a phrase, a sentence, a short story, or a long story, using male or female voice; Buck teaches (¶0028) that the speech command may access and actuate one or more operations that may occur when the data file is processed. The operation may adjust or activate any vehicle related system such as entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc. The operation may tune a pass band of a bandwidth filter (e.g., select an audio channel), adjust a volume level, a treble setting, a bass setting, a balance control, and/or other aural settings.

8. Claims 5 and 15 are rejected under 35 U.S.C. 103 as being unpatentable over US Patent Application Publication No. 2007/0283005 to Beliles, in view of US Patent Application Publication No. 2009/0089065 to Buck, in view of US Patent Application Publication No. 2008/0307075 to Urano, and further in view of US Patent Application Publication No. 2015/0046582 to Gelvin et al. (hereinafter Gelvin).

Regarding Claim 5, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 4. Further, Gelvin discloses:

wherein the sensor is a thermoelectric sensor that responds to a temperature or to a temperature gradient of an object using conduction, convection, or radiation, wherein the sensor is a photoelectric sensor that responds to a visible or an invisible light, the invisible light is infrared, ultraviolet, X-rays, or gamma rays, wherein the photoelectric sensor is based on the photoelectric or photovoltaic effect, and comprises a semiconductor component that comprises a photodiode, a phototransistor, or a solar cell, or wherein the photoelectric sensor is based on Charge-Coupled Device (CCD) or a Complementary Metal-Oxide Semiconductor (CMOS) element; Gelvin teaches (in ¶0376) Wireless Integrated Network Sensor Next Generation (WINS) that may

continuously or periodically sense status, for example, temperature, shock, vibration, motion, tip, light level etc. Gelvin teaches (in ¶0287) that the Pico WINs node 4200, or sensing element, exploits micropower CMOS technology including a low light visible photodetector channel, CMOS passive IR sensor (polysilicon bolometer), and PVF.sub.2 vibration and acoustic sensor. The PicoWINS sensors reduce power dissipation with piezoelectric and optical sensors that require no voltage or current bias. Gelvin teaches (¶0087) that the network includes nodes 802, gateway nodes 804, server 806, and web assistants or node control web or browser pages (not shown), but is not so limited. The sensor nodes 802 include any combination of actuators, sensors, signal processors, energy or power supplies, data storage devices, wireless communication devices, wireline communication devices, and self-location capabilities. The sensor nodes 802 are distributed in an environment 899 that is to be monitored or controlled. Gelvin teaches (¶0095) that the devices or functions of the network that are linked to the physical world include, but are not limited to, the sensor suite 1106, the communication devices 1108, the signal processors and storage devices 1110, the power or energy supplies 1112, and the actuation suite 1114.

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine the method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising and a method for operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data; processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message and capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data, as disclosed by Beliles in view of Buck in view of Urano, and wherein the sensor is a thermoelectric sensor that responds to a temperature or to a temperature gradient of an object using conduction, convection, or radiation, wherein the sensor is a photoelectric sensor that responds to a visible or an invisible light, the invisible light is infrared, ultraviolet, X-rays, or gamma rays, wherein the photoelectric sensor is based on the photoelectric or photovoltaic effect, and comprises a semiconductor

component that comprises a photodiode, a phototransistor, or a solar cell, or wherein the photoelectric sensor is based on Charge-Coupled Device (CCD) or a Complementary Metal-Oxide Semiconductor (CMOS) element, as taught by Gelvin, for the purpose of implementing a distributed network and Internet access to sensors, controls, and processors that are embedded in equipment, facilities, and the environment (Gelvin, ¶0004).

Regarding Claim 15, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Gelvin discloses:

wherein the wireless network uses a wireless communication over a licensed or an unlicensed radio frequency band, that is an Industrial, Scientific and Medical (ISM) radio band; Gelvin teaches (in ¶0144) nodes can communicate using a number of communication modes, including the FCC industrial, scientific, and medical (ISM) band spread spectrum channels. These channels, in addition to providing robust communication, are unlicensed, thus eliminating wireless access subscription fees for short range coverage. Power limitations, however, may affect wide area coverage, so communication over such channels may be supplemented by lower speed access over licensed channels (e.g., via cellular modems), with access mediated by the proxy.

9. Claims 12 and 14 are rejected under 35 U.S.C. 103 as being unpatentable over US Patent Application Publication No. 2007/0283005 to Beliles, in view of US Patent Application Publication No. 2009/0089065 to Buck, in view of US Patent Application Publication No. 2008/0307075 to Urano and further in view of US Patent Application Publication No. 2010/0071053 to Ansari et al. (hereinafter Ansari).

Regarding Claim 12, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 11. Beliles (¶0030 and ¶0031) that the data packets are exchanged among the network devices and network-attached devices (sensors, translators, monitor/control systems, physical control devices, etc.) of the computer network 100 using predefined network communication protocols such as the

Transmission Control Protocol/Internet Protocol (TCP/IP), User Datagram Protocol (UDP), Asynchronous Transfer Mode (ATM) protocol, Frame Relay protocol, Internet Packet Exchange (IPX) protocol, etc. The network interfaces may be configured (i.e. with an IPv4 or IPv6 addresses, protocols, security, DNS, gateway information etc.) to transmit and/or receive data using a variety of different communication protocols, including, inter alia, TCP/IP, UDP, ATM, synchronous optical networks (SONET), wireless protocols, Frame Relay, Ethernet, Fiber Distributed Data Interface (FDDI), etc. Further, Ansari discloses:

wherein the digital address is a MAC layer address that is MAC-48, EUI-48, or EUI-64 address type or wherein the digital address is a layer 3 address and is static or dynamic IP address that is IPv4 or IPv6 type address; Ansari teaches (¶0116) that the DHCP client particularly requests via a UDP/IP (User Datagram Protocol/Internet Protocol (e.g. Ipv4, Ipv6, etc.) configured connection information such as the IP address that the gateway device 10 has been dynamically assigned by a DHCP service (not shown), and/or any the subnet mask information, the gateway device should be using. The DHCP server dynamically assigns or allocates network IP addresses to subordinate client endpoints on a leased, e.g. timed basis. Ansari teaches (¶0132) that the multi-services gateway device 10 hosts the various in-home device interfaces, and facilitates the moving of information from one point to another. Some of the in-home endpoint device processing duties performed by the gateway device 10 include, but are not limited to: detecting new devices and provide IP addresses dynamically or statically; functioning as a (Network Address Translator) NAT, Router and Firewall; providing a centralized disk storage in the home; obtaining configuration files from the service management center and configuring all in-home devices. Ansari teaches (Fig. 3) the Physical/Network layer with user premises hardware components required for delivering data services (i.e. Internet connectivity) along with a separate, non-integrated managed hardware used in delivering a set of managed application services. The Network Service Provider Wide Area Network Termination Apparatus allows for a typical termination of Wide Area Network Services, such as DSL, Cable, Fiber, etc., by a network services provider.

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine the method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising and a method for

operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data; processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message and capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data, as disclosed by Beliles in view of Buck in view of Urano, and wherein the digital address is a MAC layer address that is MAC-48, EUI-48, or EUI-64 address type or wherein the digital address is a layer 3 address and is static or dynamic IP address that is IPv4 or IPv6 type address, as taught by Ansari, for the purpose of implementing the gateway device that is enabled with client programming for client-server communications using a presence and networking messaging protocol and communicate with associated endpoint devices to local and/or remote presence and networking message servers or other devices via a wide area network (Ansari, ¶0001).

Regarding Claim 14, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Ansari discloses:

wherein the wireless network is a Wireless LAN (WLAN) that is according to, or base on, IEEE 802.11-2012, IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, or IEEE 802.11ac; Ansari teaches (in ¶0096) that the connectivity may be provided by implementation of one or more USB ports (interfaces) 13, a wired Local Area Network connection such as provided by an Ethernet local area network (LAN) interface 16, or, a wireless network interface via a WiFi LAN access point 62 provided, for example, in accordance with the I.E.E.E. 802.11 b/g/n wireless or wireless network communications standard. These physical interfaces provide the required network interconnectivity for the endpoint devices to connect to the multiple application services.

10. Claims 17 - 26 are rejected under 35 U.S.C. 103 as being unpatentable over US Patent Application Publication No. 2007/0283005 to Beliles, in view of US Patent Application Publication No.

2009/0089065 to Buck, in view of US Patent Application Publication No. 2008/0307075 to Urano and further in view of US Patent Application Publication No. 2017/0272316 to Johnson et al. (hereinafter Johnson).

Regarding Claim 17, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Johnson teaches:

wherein the client device or the controlled device is integrated in, is part of, or is entirely included in, an appliance; Johnson teaches (¶0142) that the client device or the controlled devices are mobile, fixed, wearable, portable, integrated, cloud-based, distributed and they can be interfaced with kitchen appliances.

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine the method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising and a method for operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data; processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message and capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data, as disclosed by Beliles in view of Buck in view of Urano, and wherein the client device or the controlled device is integrated in, is part or, or is entirely included in, an appliance, as taught by Johnson, for the purpose of implementing techniques for deploying and maintaining Internet-connected networked devices (Johnson, ¶0009).

Regarding Claim 18, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 17. Further, Johnson teaches:

wherein the primary functionality of the appliance is associated with food storage, handling, or preparation; Johnson teaches (¶0142) that the controlled appliances includes kitchen appliances, heating systems (such as microwaves, ovens, stoves etc.) and refrigeration systems (¶0258).

Regarding Claim 19, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 18. Further, Johnson teaches:

wherein the primary function of the appliance is heating food, and wherein the appliance is a microwave oven, an electric mixer, a stove, an oven, or an induction cooker; Johnson teaches (¶0142) that the controlled appliances includes kitchen appliances and heating systems (such as microwaves, ovens, stoves etc.)

Regarding Claim 20, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 18. Further, Johnson teaches:

wherein the appliance is a refrigerator, a freezer, a food processor, a dishwashers, a food blender, a beverage maker, a coffeemaker, or an iced-tea maker; Johnson teaches (¶0142) that the controlled appliances includes kitchen appliances, heating systems (such as microwaves, ovens, stoves etc.) and refrigeration systems (¶0258).

Regarding Claim 21, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 17. Further, Johnson teaches:

wherein the primary function of the appliance is associated with environmental control, and the appliance is part of an HVAC system; Johnson teaches (¶0258) that the electronic system can be an air-conditioning system, HVAC system, heating system, cooling system etc.

Regarding Claim 22, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 21. Further, Johnson teaches:

wherein the primary function of the appliance is associated with temperature control, and wherein the appliance is an air conditioner or a heater; Johnson teaches (¶0258) that the electronic system can be an air-conditioning system, HVAC system, heating system, cooling system etc.

Regarding Claim 23, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 17. Further, Johnson teaches:

wherein the primary function of the appliance is associated with cleaning, wherein the appliance primary function is associated with clothes cleaning and the appliance is a washing machine or a clothes dryer, or wherein the appliance is a vacuum cleaner; Johnson teaches (¶0013) that the IoT consumer devices includes washer/dryers that use Wi-Fi for remote monitoring etc.

Regarding Claim 24, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 17. Further, Johnson teaches:

wherein the appliance is an answering machine, a telephone set, a home cinema system, a HiFi system, a CD or DVD player, an electric furnace, a trash compactor, a smoke detector, a light fixture, or a dehumidifier; Johnson teaches (¶0142) that the electronic device may include multimedia players, video recorders, VCRs, DVRs, TVs, phone, phone systems, cellular phones, smart phone, thermostats, heating systems, climate monitoring systems, internet TV boxes, media boxes, entertainment centers, entertainment systems etc.

Regarding Claim 25, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 1. Further, Johnson teaches:

wherein the actuator is an electric light source for converting electrical energy into light that emits visible or non-visible light for illumination or indication, and the non-visible light is infrared, ultraviolet, X-rays, or gamma rays; Johnson teaches (¶0259) that the electronic device may include lighting systems or light components such as a ceiling light (¶0265), LEDs light bulb (¶0264), or

some other lighting bulb/fixtures (the Examiner notes that it is well known in the art that the lighting fixtures and system uses electricity to emit visible light for illumination).

Regarding Claim 26, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 25. Further, Johnson teaches:

wherein the electric light source comprises a lamp, an incandescent lamp, a gas discharge lamp, a fluorescent lamp, a Solid-State Lighting (SSL), a Light Emitting Diode (LED), an Organic LED (OLED), a polymer LED (PLED), or a laser diode; Johnson teaches that the light source may include ceiling light (¶0265), LEDs light bulb (¶0264), or some other lighting bulb/fixtures.

Response to Arguments

Claim Rejections - 35 USC § 112

11. Applicant's arguments and amendments, filed on 10/17/2017 with respect to Claims 5, 10, 21 and 26 have been fully considered and they are persuasive. Hence, the *35 USC § 112* rejection of Claims 5, 10, 21 and 26 is withdrawn.

Claim Rejections - 35 USC § 101

12. Applicant's arguments and amendments, filed on 10/17/2017 with respect to Claims 1 - 30 have been fully considered and they are not persuasive. Hence, the *35 USC § 101* rejection of Claims 1- 30 is maintained.

In response to applicant's argument that, *"the Action equates 'capturing the human voice data' to 'obtaining and comparing intangible data' - a human voice cannot be considered as 'intangible data' and capturing the voice by a microphone cannot be considered as 'obtaining and comparing' in general, and 'obtaining and comparing intangible data' in particular, the action equates 'processing by the server' to 'collecting and comparing known information', a human voice cannot be considered as 'known information', and voice processing cannot be equated to any 'collecting and comparing' in general, and*

'collecting and comparing known information' in particular," the Examiner notes that human voice data is intangible form of data (intangible: unable to be touched or grasped; not having physical appearance). Further, the Examiner notes that the applicant's specifications (Fig. 19) discloses that once the human voice data is captured (*obtaining and comparing intangible data, CyberSource)*, it is then sent to the server which then captures and performs voice processing on the human voice data, along with voice recognition function and then a voice processor having an output for processing the voice is operative to produce actuator commands in response to the voice processor output according to the control logic, and is operative to transmit the actuator commands to the client (i.e. *collecting information, analyzing it and notifying a user, FairWarning*). The Examiner notes that all claim limitations entirety makes up he abstract idea, leaving nothing but a storage medium, processor and instructions remaining, which are part of a general purpose computer, and therefore do not amount to significantly more than the abstract idea itself.

Claim Rejections - 35 USC § 103

13. Applicant's arguments and amendments, filed on 10/17/2017 with respect to Claims 1 – 30 have been fully considered and they are not persuasive. Hence, the *35 USC § 103* rejection of Claims 1 – 30 is maintained. Examiner notes that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant argument, *"the rejection is vague and unclear since it provides no more than copied passages from the references … it is not clear how claimed elements or features are equated to elements or features in the references,"* the Office notes that the Beliles, Buck and Urano references discloses all the limitations clearly, all the claimed elements or features are equated to elements or features in the references distinctly as noted above.

In response to applicant's argument that, *"the Belies reference is not in analogous field and affectively teaches away from the claimed invention … and the disclosure is silent regarding any wireless*

networking," the Examiner notes that in (Fig. 6 and ¶0004), Beliles discloses a method and system for dynamically responding to network events, by collecting monitored data from sensors and detecting network events/notifications and then responding accordingly, which is analogous to the teachings of the applicant's specifications. Beliles teaches that the network can be a wireless network (¶0027).

In response to applicant's argument that, *"the Belies reference is silent regarding any device communicating over a wireless network to an Internet-connected server … and the Belies invention focuses on security and safety automatic operation without any human intervention,"* the Examiner notes that Beliles teaches (¶0016 and ¶0034) that the data is exchanged between the sensors, the network devices, the monitoring and control systems and servers over the network infrastructure (e.g. the Internet) which is spanned globally. Further, the Examiner notes that Beliles reference was not used to teach the voice controlled actuator, but rather Buck teaches (in ¶0028) a system that may include a device that converts spoken words into recognizable commands. In response to control signals, an actuator 406 may perform an action such as transmitting an output signal.

In response to applicant's argument that, *"the Belies, Buck and Urano references are non-analogous,"* the Examiner notes that Beliles (in ¶0004) discloses a method and system for dynamically responding to sensor data and network events at a monitoring/control network device, the Buck reference teaches (¶0003) the techniques for collecting data over the network and generating control actuator commands and Urano reference teaches (¶0012) the implementation of the system using sensor nodes and to improve the operational efficiency. Examiner notes that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

14. 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. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HASSAN KHAN whose telephone number is (313) 446-6574. The examiner can normally be reached on MONDAY - THURSDAY: 8AM-6PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Chea can be reached on (571) 272-3951. 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. 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.

/Hassan A. Khan/
Examiner, Art Unit 2456

/PHILIP CHEA/
Supervisory Patent Examiner, Art Unit 2456

Notice of References Cited	Application/Control No. 15/657,163	Applicant(s)/Patent Under Reexamination BINDER ET AL.	
	Examiner HASSAN KHAN	Art Unit 2456	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2003/0105389 A1	06-2003	Noonan, Julianne	G06F19/3406	600/300
*	B	US-2007/0283005 A1	12-2007	Beliles; Robert P.	H04L41/0816	709/224
*	C	US-2008/0307075 A1	12-2008	Urano; Takehiro	G06F1/14	709/220
*	D	US-2009/0089065 A1	04-2009	Buck; Markus	B60R16/0373	704/275
*	E	US-2009/0198380 A1	08-2009	Friedman; Scott Justin-Marl	A47L9/009	700/259
*	F	US-2009/0224906 A1	09-2009	BALGARD; Lennart	H04L41/0809	340/539.1
*	G	US-2010/0071053 A1	03-2010	Ansari; Amir	G06Q30/04	726/12
*	H	US-2013/0091279 A1	04-2013	Haddad; Wassim	H04L12/2834	709/225
*	I	US-2013/0308581 A1	11-2013	Rofougaran; Ahmadreza (Reza)	H04L12/40013	370/329
*	J	US-2015/0046582 A1	02-2015	Gelvin; David C.	H04L67/12	709/224
*	K	US-2016/0062330 A1	03-2016	Abe; Yuuichi	G08C17/02	700/12
*	L	US-2017/0272316 A1	09-2017	Johnson; Michael W.	G06Q10/103	1/1
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
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	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.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15657163	BINDER ET AL.
	Examiner	Art Unit
	HASSAN KHAN	2456

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

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

CLAIM		DATE								
Final	Original	09/29/2017	01/19/2018							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
	5	✓	✓							
	6	✓	✓							
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	27	✓	✓							
	28	✓	✓							
	29	✓	✓							
	30	✓	✓							

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15657163	BINDER ET AL.
	Examiner	Art Unit
	HASSAN KHAN	2456

CPC- SEARCHED		
Symbol	Date	Examiner
H04L67/12, B60K 31/00, B60K 31/18, B60Y2200/11, B60Y2200/12, B60Y2200/126, B60Y2200/13, B60Y2200/30, B60Y2200/40, B60Y2200/50, B60Y2200/90, G01C 21/00, G06Q2240/00, G07C 5/008, G08G 1/00 (combined wit	9/29/2017	H.K.
B60K 31/00, B60K 31/18, B60Y2200/11, B60Y2200/12, B60Y2200/126, B60Y2200/13, B60Y2200/30, B60Y2200/40, B60Y2200/50, B60Y2200/90	01/19/2018	H.K.
H04L67/12, G01C 21/00, G06Q2240/00, G07C 5/008, G08G 1/00 (combined with text search)	01/19/2018	H.K.

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	218 (combined with text search)	9/29/2017	H.K.
709	218 (combined with text search)	01/19/2018	H.K.

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

SEARCH NOTES		
Search Notes	Date	Examiner
Assignee search conducted (see EAST search history)	9/29/2017	H.K.
Google Patents search conducted	9/29/2017	H.K.
Inventor search conducted (see EAST search history)	9/29/2017	H.K.
EAST Search History (see attached)	9/29/2017	H.K.
Assignee search conducted (see EAST search history)	01/19/2018	H.K.
Inventor search conducted (see EAST search history)	01/19/2018	H.K.

/HASSAN KHAN/ Examiner.Art Unit 2456	

SEARCH NOTES		
Search Notes	**Date**	**Examiner**
EAST Search History (see attached)	01/19/2018	H.K.

INTERFERENCE SEARCH			
US Class/ CPC Symbol	**US Subclass / CPC Group**	**Date**	**Examiner**

/HASSAN KHAN/ Examiner.Art Unit 2456	

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	15657163
Filing Date	2017-07-23
First Named Inventor	Yehuda Binder
Art Unit	2456
Examiner Name	KHAN, HASSAN ABDUR-RAHMAN
Attorney Docket Number	BINDER-014-US3

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Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20080307075	A1	2008-12-11	Urano; Takehiro ; et al.	
	2	20090089065	A1	2009-04-02	Buck; Markus ; et al.	
	3	20170272316	A1	2017-09-21	Johnson; Michael W. ; et al.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	15657163
	Filing Date	2017-07-23
	First Named Inventor	Yehuda Binder
	Art Unit	2456
	Examiner Name	KHAN, HASSAN ABDUR-RAHMAN
	Attorney Docket Number	BINDER-014-US3

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Examiner Initials*	Cite No	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, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
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EXAMINER SIGNATURE

Examiner Signature	/HASSAN A KHAN/	Date Considered	01/19/2018

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

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**	Application Number	15657163
	Filing Date	2017-07-23
	First Named Inventor	Yehuda Binder
	Art Unit	2456
	Examiner Name	KHAN, HASSAN ABDUR-RAHMAN
	Attorney Docket Number	BINDER-014-US3

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

X See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	2017-11-26
Name/Print	Yehuda Binder	Registration Number	73612

This collection of information is required by 37 CFR 1.97 and 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 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty. 01/19/2018

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	13516	H04L67/12.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:43
L5	5776	709/218.ccls..	US-PGPUB; USPAT	OR	ON	2018/01/19 19:43
L6	41	(maytal and benjamin).in.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:43
L7	387	(binder and yehuda).in.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:43
L8	48	(may and patents).aanm.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:43
L9	44	(may and patents).as.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:43
L10	0	(fire and eye).aanm.	US-PGPUB; USPAT	ADJ	ON	2018/01/19 19:44
L11	140	(fireeye).as.	US-PGPUB; USPAT	ADJ	ON	2018/01/19 19:44
L12	113	(fireeye).aanm.	US-PGPUB; USPAT	ADJ	ON	2018/01/19 19:44
L13	1	(US-20130201316-$).did.	US-PGPUB	ADJ	ON	2018/01/19 19:44
L14	674	(home with network) same sensor same gateway same network	US-PGPUB	ADJ	ON	2018/01/19 19:44
L15	293	(home with network) with sensor with gateway	US-PGPUB	ADJ	ON	2018/01/19 19:44
L16	5	(home with network) with sensor with gateway with command	US-PGPUB	ADJ	ON	2018/01/19 19:44
L17	22	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2018/01/19 19:44

L18	21	L17 and (vehicle or vehical or automobile or car)	US-PGPUB; USPAT	ADJ	ON	2018/01/19 19:44
L19	21	L17 and (vehicle or vehical or automobile or car) and actuator	US-PGPUB; USPAT	ADJ	ON	2018/01/19 19:44
L20	15	L17 and (vehicle or vehical or automobile or car) and actuator and sensor and network and cellular and wireless	US-PGPUB; USPAT	ADJ	ON	2018/01/19 19:44
L21	15	L17 and (coupled)	US-PGPUB; USPAT	ADJ	ON	2018/01/19 19:44
L22	1	L17 and (router)	US-PGPUB; USPAT	ADJ	ON	2018/01/19 19:44
L23	1030	(vehicle or car) with router with (control or server) with network	US-PGPUB; USPAT	ADJ	ON	2018/01/19 19:44
L24	18	(vehicle or car) with router with (control or server) with network with actuator	US-PGPUB; USPAT	ADJ	ON	2018/01/19 19:44
L25	2	"20090198380"	US-PGPUB; USPAT	ADJ	ON	2018/01/19 19:44
L26	1865	L10 L11 L12 L13 L14 L15 L16 L17 L18 L19 L20 L21 L22 L23 L24 L25	US-PGPUB; USPAT	OR	ON	2018/01/19 19:44
L27	13516	H04L67/12.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L28	27138	B60K 31/00.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L29	27138	B60K 31/18.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L30	293	B60Y2200/11.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L31	889	B60Y2200/12.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L32	202	B60Y2200/126.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L33	329	B60Y2200/13.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L34	37	B60Y2200/30.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L35	113	B60Y2200/40.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L36	17	B60Y2200/50.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45

L37	94	B60Y2200/90.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L38	38949	G01C 21/00.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L39	183	G06Q2240/00.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L40	10308	G07C 5/008.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L41	44418	G08G 1/00	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L42	17401	G08G 1/00.cpc.	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
L43	127924	L27 L28 L29 L30 L31 L32 L33 L34 L35 L36 L37 L38 L39 L40 L41 L42	US-PGPUB; USPAT	OR	ON	2018/01/19 19:45
S1	1	"13733634"	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:33
S2	7358	(actuator with sensor with network)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:34
S3	161	(actuator with sensor with network with router)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:34
S4	14	(actuator with sensor with network with router with (car or vehicle))	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:34
S5	1020	(actuator with sensor with network with (car or vehicle))	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:37
S6	535	S5 and (router or routing)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:38
S7	147	S5 and (NAT or DHCP)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:38
S8	54	S5 and (control adj2 logic)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:39
S9	7358	(actuator with sensor with network)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:48
S10	675	S9 and (piezoelectric$6 or (piezo$1electric$6))	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:49
S11	120	S10 and (network with (routing or router))	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:49
S12	58	S11 and (vehicle or car)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:49

S13	21	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:08
S14	21	S13 and actuator	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:08
S15	1	S13 and (actuator same router)	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:08
S16	200	(actuator same router same ((vehicle or car or automobile or transport) or (building)))	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:11
S17	119	(actuator same router same ((vehicle or car or automobile or transport) or (building))) same network	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:12
S18	110	(actuator same router same ((vehicle or car or automobile or transport) or (building))) same network same sensor	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:12
S19	76	(actuator same router same ((vehicle or car or automobile or transport) or (building))) same network same (sensor or control) same data	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:12
S20	68	(actuator same router same ((vehicle or car or automobile) or (building))) same network same (sensor or control) same data	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:13
S21	21	(actuator same router same ((vehicle or car or automobile) same (building))) same network same (sensor or control) same data	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:15
S22	21	actuator same router same (vehicle or car or automobile) same building same network same (sensor or control) same data	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:15
S23	47	S20 XOR S22	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:17
S24	1	(US-8195844-$).did.	USPAT	ADJ	ON	2017/02/13 22:36
S25	1	"20090083589"	USPAT	ADJ	ON	2017/02/13 22:36
S36	1	(US-20130201316-$).did.	US-PGPUB	ADJ	ON	2017/02/14 00:34
S37	520	(home with network) same sensor same gateway same network	US-PGPUB	ADJ	ON	2017/02/14 00:37
S38	222	(home with network) with sensor with gateway	US-PGPUB	ADJ	ON	2017/02/14 00:37
S39	4	(home with network) with sensor with gateway with command	US-PGPUB	ADJ	ON	2017/02/14 00:38

S40	22	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:23
S41	21	S40 and (vehicle or vehical or automobile or car)	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:29
S42	21	S40 and (vehicle or vehical or automobile or car) and actuator	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:29
S43	15	S40 and (vehicle or vehical or automobile or car) and actuator and sensor and network and cellular and wireless	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:30
S44	15	S40 and (coupled)	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:35
S45	1	S40 and (router)	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:36
S46	832	(vehicle or car) with router with (control or server) with network	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:37
S47	11	(vehicle or car) with router with (control or server) with network with actuator	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:37
S48	2	"20090198380"	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:42
S49	1	"20060217840"	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:42
S50	7	(US-20160062330-$ or US-20090198380-$ or US-20060217840-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$).did.	US-PGPUB	ADJ	ON	2017/02/17 04:34
S51	4	S50 and (actuator with sensor)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:34
S52	4	S50 and (actuator)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:36
S53	3	"13404575"	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:38
S54	2	S50 and (sensor with router)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:39
S55	27	(US-20130201316-$ or US-20100030421-	US-	ADJ	ON	2017/02/17

		$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	PGPUB; USPAT			04:39
S56	3	S55 and (sensor with router)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:39
S57	319	(actuator with sensor with router)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:40
S58	178	(actuator NEAR9 sensor NEAr9 router)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:40
S59	125	(actuator with sensor with router with (command or signal or transmi$6 or data))	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:41
S60	7	(US-20160062330-$ or US-20090198380-$ or US-20060217840-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$).did.	US-PGPUB	ADJ	ON	2017/02/17 21:05
S61	2	S60 and (router with (building or vehicle or car))	US-PGPUB; USPAT	ADJ	ON	2017/02/17 21:06
S62	2	S60 and (router with (building or vehicle or car) with sensor)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 21:06
S63	524	(router with (building or vehicle or car) with sensor)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 21:06
S64	96	(router near9 (building or vehicle or car) near5 sensor)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 21:07
S65	28	(router near9 (building or vehicle or car) near9 sensor near9 network)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 21:07
S66	1	(US-20130201316-$).did.	US-PGPUB	ADJ	ON	2017/02/17 21:11
S67	28	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-	US-PGPUB; USPAT	ADJ	ON	2017/02/20 05:11

		20120253480-$ or US-20070283005-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.				
S68	27	S67 and (control with (actuator or sensor))	US-PGPUB; USPAT	ADJ	ON	2017/02/20 05:11
S69	22	S67 and (control NEAR0 (actuator or sensor))	US-PGPUB; USPAT	ADJ	ON	2017/02/20 05:11
S70	26	S67 and (control NEAR9 (actuator or sensor))	US-PGPUB; USPAT	ADJ	ON	2017/02/20 05:11
S71	9	S67 and (command NEAR9 (actuator or sensor))	US-PGPUB; USPAT	ADJ	ON	2017/02/20 05:15
S72	2	(US-20160062330-$ or US-20070283005-$).did.	US-PGPUB	ADJ	ON	2017/02/20 06:05
S73	1	S72 and ((additional or extra or second or third) with sensor)	US-PGPUB	ADJ	ON	2017/02/20 06:29
S74	28	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/02/20 06:30
S75	12	S74 and ((additional or extra or second or third) with sensor)	US-PGPUB	ADJ	ON	2017/02/20 06:31
S76	2	S72 and ((more) with sensor)	US-PGPUB	ADJ	ON	2017/02/20 06:32
S77	5	S74 and piezoelectric	US-PGPUB	ADJ	ON	2017/02/20 06:43
S78	2	S72 and (IP or address or internet or protocol)	US-PGPUB	ADJ	ON	2017/02/20 06:56
S79	2	S74 and (DHCP and (IPv4 or IPv6))	US-PGPUB	ADJ	ON	2017/02/20 07:02
S80	146	(control$6 with (sensor or actuator) with network) and (DHCP and (IPv4 or IPv6))	US-PGPUB	ADJ	ON	2017/02/20 07:04
S81	69	(control$6 with (sensor or actuator) with network) and (DHCP with (IPv4 or IPv6))	US-PGPUB	ADJ	ON	2017/02/20 07:04
S82	1	(US-20130201316-$).did.	US-PGPUB	ADJ	ON	2017/02/20 07:12
S83	36	S81 and zigbee	US-PGPUB	ADJ	ON	2017/02/20 07:21
S84	9	S81 and zigbee and (temperature with sensor)	US-PGPUB	ADJ	ON	2017/02/20 07:22

S85	36	S81 and zigbee and (sensor)	US-PGPUB	ADJ	ON	2017/02/20 07:22
S86	15	S81 and zigbee and (temperature)	US-PGPUB	ADJ	ON	2017/02/20 07:22
S87	12	S81 and zigbee and (temperature) and (DHCP with assign$6)	US-PGPUB	ADJ	ON	2017/02/20 07:23
S88	3	(US-20120253480-$ or US-20100071053-$ or US-20070283005-$).did.	US-PGPUB	ADJ	ON	2017/02/21 02:26
S89	1	S88 and (IP with assign$6)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:28
S90	3	S88 and (power)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:34
S91	32	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:35
S92	15493	(router with power)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:36
S93	2	S91 and (router with power)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:36
S94	1606	(router with power with (case or box or inside or enclosure or casing))	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:36
S95	578	(router NEAR9 power NEAR9 (case or box or inside or enclosure or casing))	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:37
S96	587	(router NEAR9 power NEAR9 (housed or enclos$5 or case or box or inside or enclosure or casing))	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:37
S97	17	(router NEAR9 power NEAR9 (housed or enclos$5 or case or box or inside or enclosure or casing) NEAR9 (AC or DC))	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:37
S98	17	S91 and (light with sensor)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 03:05
S99	0	S88 and (light with (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:19
S100	5	S91 and (light with (invisible or visible or	US-	ADJ	ON	2017/02/21

		infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	PGPUB			03:19
S101	5	S91 and (light NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:20
S102	128	((actuator with light) NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:22
S103	79	((actuator NEAR5 light) NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:23
S104	6	(sensor with (actuator NEAR5 light) NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:23
S105	1	(sensor with (actuator NEAR2 light) NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:25
S106	21	((actuator NEAR2 light) NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:25
S107	1	S106 and invisible	US-PGPUB	ADJ	ON	2017/02/21 03:37
S108	1	S106 and (nonvisible or "non-visible" or invisible)	US-PGPUB	ADJ	ON	2017/02/21 03:38
S109	12	S106 and (LED or SSL or (discharge adj2 lamp) or (flourescent adj2 lamp) or PLED or (laser near5 diode))	US-PGPUB	ADJ	ON	2017/02/21 03:50
S110	10	S106 and (diode or SSL or (discharge adj2 lamp) or (flourescent adj2 lamp) or PLED or (laser near5 diode))	US-PGPUB	ADJ	ON	2017/02/21 03:50
S111	10	S106 and (diode or (discharge adj2 lamp) or (flourescent adj2 lamp) or PLED or (laser near5 diode))	US-PGPUB	ADJ	ON	2017/02/21 03:50
S112	4	((actuator NEAR2 light NEAR5 (discharge or emit)) NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 05:29
S113	58	(actuator NEAR2 light NEAR5 (discharge or emit))	US-PGPUB	ADJ	ON	2017/02/21 05:30
S114	4	(actuator NEAR2 light NEAR5 (discharge or emit) NEAR9 visible)	US-PGPUB	ADJ	ON	2017/02/21 05:30
S115	5	(actuator NEAR2 light NEAR5 (discharge or emit) with sensor)	US-PGPUB	ADJ	ON	2017/02/21 05:31
S116	1605	((Frequency adj3 Division adj3 Multiplexing) or FDM) with power with (communication or signal or transmission)	US-PGPUB	ADJ	ON	2017/02/21 05:48
S117	1	((Frequency adj3 Division adj3 Multiplexing) or FDM) with power with (communication or signal or transmission) with band with splitter	US-PGPUB	ADJ	ON	2017/02/21 05:48
S118	34	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$	US-PGPUB; USPAT	ADJ	ON	2017/02/21 05:54

		or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.				
S119	13	S118 and splitter	US-PGPUB; USPAT	ADJ	ON	2017/02/21 05:54
S120	13	S118 and splitter and frequency	US-PGPUB; USPAT	ADJ	ON	2017/02/21 05:54
S121	1	S118 and (splitter same frequency)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 05:55
S122	234	(power with data with splitter with frequency)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 05:56
S123	1	(US-20130201316-$).did.	US-PGPUB	ADJ	ON	2017/02/21 10:03
S124	462	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access))	US-PGPUB	ADJ	ON	2017/02/21 10:07
S125	261	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency))	US-PGPUB	ADJ	ON	2017/02/21 10:08
S126	302	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel))	US-PGPUB	ADJ	ON	2017/02/21 10:08
S127	273	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency))	US-PGPUB	ADJ	ON	2017/02/21 10:09
S128	112	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency)) and transformer and capacitor	US-PGPUB	ADJ	ON	2017/02/21 10:10
S129	88	(high adj2 pass adj2 filter) and (low adj2	US-	ADJ	ON	2017/02/21

		pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency)) and transformer and capacitor and sensor	PGPUB			10:10
S130	41	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency)) and transformer and capacitor and sensor and (split or splits or splitter)	US-PGPUB	ADJ	ON	2017/02/21 10:13
S131	31	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency)) and (transformer with capacitor with (windings or wirings or coils))	US-PGPUB	ADJ	ON	2017/02/21 10:15
S132	3	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency)) and (transformer with capacitor with (windings or wirings or coils)) and sensor and (split or splits or splitter)	US-PGPUB	ADJ	ON	2017/02/21 10:19
S133	239	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near3 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency))	US-PGPUB	ADJ	ON	2017/02/21 10:34
S134	262	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (modula$4 near5 band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency))	US-PGPUB	ADJ	ON	2017/02/21 10:35
S135	45	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 modula$4 near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency))	US-PGPUB	ADJ	ON	2017/02/21 10:35
S136	1	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 modula$4 near5 (band or frequenc$4 or channel) near5 (different or distinct or seperate or	US-PGPUB	ADJ	ON	2017/02/21 10:51

		unique or other or another)) and ((data or communication) near5 (channel or band or frequency))				
S137	57	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequenc$4 or channel) near5 (different or distinct or seperate)) and ((data or communication) near5 (channel or band or frequency))	US-PGPUB	ADJ	ON	2017/02/21 11:00
S138	0	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequenc$4 or channel) near5 (different or distinct or seperate)) and ((data or communication) near5 (channel or band or frequency)) and (split or splitter or divide) and (transformer with capacitor with (windings or coils))	US-PGPUB	ADJ	ON	2017/02/21 11:01
S139	17	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequenc$4 or channel) near5 (different or distinct or seperate)) and ((data or communication) near5 (channel or band or frequency)) and (split or splitter or divide) and (transformer with capacitor)	US-PGPUB	ADJ	ON	2017/02/21 11:01
S140	1	(US-20130308581-$).did.	US-PGPUB	ADJ	ON	2017/02/21 11:09
S141	1	(US-20110118888-$).did.	US-PGPUB	ADJ	ON	2017/02/21 11:28
S142	2	(US-20160062330-$ or US-20070283005-$).did.	US-PGPUB	ADJ	ON	2017/02/21 11:49
S143	0	S142 and appliance	US-PGPUB; USPAT	ADJ	ON	2017/02/21 11:49
S144	1	(US-20130201316-$).did.	US-PGPUB	ADJ	ON	2017/02/21 12:06
S145	205	(yehuda and binder).in.	US-PGPUB	ADJ	ON	2017/02/21 12:24
S146	26	(benjamin and maytal).in.	US-PGPUB	ADJ	ON	2017/02/21 12:25
S147	26	(may and patents).as.	US-PGPUB	ADJ	ON	2017/02/21 12:25
S148	25	(may and patents).aanm.	US-PGPUB	ADJ	ON	2017/02/21 12:25
S149	8	S147 and S148	US-PGPUB	ADJ	ON	2017/02/21 12:25
S150	1	S145 and S146	US-PGPUB	ADJ	ON	2017/02/21 12:25
S151	43	S147 or S148	US-PGPUB	ADJ	ON	2017/02/21 12:26
S152	230	S145 or S146	US-PGPUB	ADJ	ON	2017/02/21 12:26
S153	230	S151 or S152	US-	ADJ	ON	2017/02/21

			PGPUB			12:26
S154	17	S153 and piezoelectric.clm.	US-PGPUB	ADJ	ON	2017/02/21 12:26
S155	1	S153 and (vehicle and router and actuator).clm.	US-PGPUB	ADJ	ON	2017/02/21 12:27
S156	7130	H04L67/12.cpc.	US-PGPUB	ADJ	ON	2017/02/21 12:27
S157	993	348/77.ccls.	US-PGPUB	ADJ	ON	2017/02/21 12:27
S158	374	700/28.ccls.	US-PGPUB	ADJ	ON	2017/02/21 12:27
S159	148	700/22.ccls.	US-PGPUB	ADJ	ON	2017/02/21 12:28
S160	1455	709/218.ccls.	US-PGPUB	ADJ	ON	2017/02/21 12:28
S161	2	"20130080642"	US-PGPUB; USPAT	ADJ	ON	2017/06/30 12:25
S162	1	"14499166"	US-PGPUB; USPAT	ADJ	ON	2017/06/30 12:27
S163	13	(US-20160062330-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$ or US-20070283005-$ or US-20130308581-$ or US-20110118888-$ or US-20130139440-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$).did.	US-PGPUB	ADJ	ON	2017/07/05 10:43
S164	2	S163 and (sensor and actuator and router)	US-PGPUB; USPAT	ADJ	ON	2017/07/05 10:43
S165	36	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-20130308581-$ or US-20110118888-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/07/05 10:44
S166	3	S165 and (sensor and actuator and router)	US-PGPUB; USPAT	ADJ	ON	2017/07/05 10:44
S168	7	S165 and (sensor same network same router)	US-PGPUB; USPAT	ADJ	ON	2017/07/05 10:45

S169	36	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-20130308581-$ or US-20110118888-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/07/05 11:20
S170	7	S169 and (sensor same network same router)	US-PGPUB; USPAT	ADJ	ON	2017/07/05 11:20
S171	3	S170 and actuator	US-PGPUB; USPAT	ADJ	ON	2017/07/05 11:20
S172	24	S169 and actuator	US-PGPUB; USPAT	ADJ	ON	2017/07/05 11:21
S173	2	(US-20160062330-$ or US-20070283005-$).did.	US-PGPUB	OR	OFF	2017/07/19 19:14
S174	1	(US-20130201316-$).did.	US-PGPUB	OR	OFF	2017/07/20 00:24
S175	1	"20120079149"	US-PGPUB	OR	OFF	2017/07/20 00:29
S176	1	"20120079149"	US-PGPUB	OR	OFF	2017/07/20 06:37
S177	1	S176 and ((sensor or actuator) with router)	US-PGPUB	OR	OFF	2017/07/20 06:37
S178	1	S176 and (router)	US-PGPUB	OR	OFF	2017/07/20 06:37
S179	0	S176 and (commands with router)	US-PGPUB	OR	OFF	2017/07/20 06:41
S180	37	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-	US-PGPUB; USPAT	OR	OFF	2017/07/20 06:41

		20130308581-$ or US-20110118888-$ or US-20120079149-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.				
S181	1	S180 and (commands with router)	US-PGPUB	OR	OFF	2017/07/20 06:41
S182	2	(actuator with commands with router)	US-PGPUB	OR	OFF	2017/07/20 06:42
S183	25	(sensor with commands with router)	US-PGPUB	OR	OFF	2017/07/20 06:42
S184	9	(sensor NEAR9 commands NEAR9 router)	US-PGPUB	OR	OFF	2017/07/20 06:42
S185	3	S184 and actuator	US-PGPUB	OR	OFF	2017/07/20 06:54
S186	3	(US-20160062330-$ or US-20100071053-$ or US-20070283005-$).did.	US-PGPUB	OR	OFF	2017/07/20 09:43
S192	3	(US-20160062330-$ or US-20100071053-$ or US-20070283005-$).did.	US-PGPUB	OR	OFF	2017/07/20 09:45
S193	3	S192 and address	US-PGPUB	OR	OFF	2017/07/20 09:45
S194	0	S192 and ((unique or individual or distinct or separate) with address)	US-PGPUB	OR	OFF	2017/07/20 09:46
S195	14	(US-20160062330-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$ or US-20070283005-$ or US-20130308581-$ or US-20110118888-$ or US-20130139440-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20120079149-$).did.	US-PGPUB	OR	OFF	2017/07/20 12:16
S200	14	(US-20160062330-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$ or US-20070283005-$ or US-20130308581-$ or US-20110118888-$ or US-20130139440-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20120079149-$).did.	US-PGPUB	OR	OFF	2017/07/20 12:17
S201	12	S200 and power	US-PGPUB	OR	OFF	2017/07/20 12:17
S202	2	S200 and (power with (socket or port or connector))	US-PGPUB	OR	OFF	2017/07/20 12:17
S203	3	S200 and (power with (AC or DC))	US-PGPUB	OR	OFF	2017/07/20 12:18
S204	1	(US-20130201316-$).did.	US-PGPUB	OR	OFF	2017/07/20 12:23
S205	0	S204 and medical	USPAT	OR	OFF	2017/07/20 12:23
S206	0	S204 and medicine	USPAT	OR	OFF	2017/07/20 12:23
S207	0	S204 and power	USPAT	OR	OFF	2017/07/20 12:23
S208	0	S204 and actuator	USPAT	OR	OFF	2017/07/20

						12:23
S209	14	S200 and sensor	US-PGPUB	OR	OFF	2017/07/20 12:23
S210	12	S200 and power	US-PGPUB	OR	OFF	2017/07/20 12:23
S212	1	S204 and medical	US-PGPUB	OR	OFF	2017/07/20 12:23
S213	5	S201 and (AC or DC)	US-PGPUB	OR	OFF	2017/07/20 12:27
S214	1	(US-20130201316-$).did.	US-PGPUB	OR	OFF	2017/07/20 14:03
S215	14	(US-20160062330-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$ or US-20070283005-$ or US-20130308581-$ or US-20110118888-$ or US-20130139440-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20120079149-$).did.	US-PGPUB	OR	OFF	2017/07/20 15:03
S220	14	(US-20160062330-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$ or US-20070283005-$ or US-20130308581-$ or US-20110118888-$ or US-20130139440-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20120079149-$).did.	US-PGPUB	OR	OFF	2017/07/20 15:05
S225	5	S220 and battery	US-PGPUB	OR	OFF	2017/07/20 15:06
S226	12	S220 and network	US-PGPUB	OR	OFF	2017/07/20 15:06
S227	3	S220 and (data with paths)	US-PGPUB	OR	OFF	2017/07/20 15:06
S228	2	S220 and (router with port)	US-PGPUB	OR	OFF	2017/07/20 15:16
S229	8	S220 and (embed or embedded or inside)	US-PGPUB	OR	OFF	2017/07/20 15:40
S230	2	S220 and ((embed or embedded or inside) with router)	US-PGPUB	OR	OFF	2017/07/20 15:49
S231	5	S220 and ((embed or embedded or inside) with sensor)	US-PGPUB	OR	OFF	2017/07/20 15:50
S232	5	S220 and ((embed or embedded or inside or contained) with sensor)	US-PGPUB	OR	OFF	2017/07/20 15:51
S233	2	S220 and ((embed or embedded or inside or contained) with router)	US-PGPUB	OR	OFF	2017/07/20 15:51
S234	5	S220 and ((router or sensor) with integrat$4)	US-PGPUB	OR	OFF	2017/07/20 15:51
S235	12	S220 and (embedded or embed or integrat$4)	US-PGPUB	OR	OFF	2017/07/20 15:56
S236	13	(US-20160062330-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$ or US-20070283005-$ or US-20130308581-$ or US-20110118888-$ or US-20130139440-$ or	US-PGPUB	OR	OFF	2017/07/20 19:05

		US-20100071053-$ or US-20030105389-$ or US-20130091279-$).did.				
S242	13	S236 and device	US-PGPUB	OR	OFF	2017/07/20 19:06
S243	0	S236 and (routing with phone)	US-PGPUB	OR	OFF	2017/07/20 19:08
S244	2	S236 and (router with phone)	US-PGPUB	OR	OFF	2017/07/20 19:08
S245	1	(US-20130201316-$).did.	US-PGPUB	OR	OFF	2017/07/20 19:22
S246	1	S245 and actuator	US-PGPUB	OR	OFF	2017/07/20 19:22
S247	1063	ISM near2 radio near2 band	US-PGPUB	OR	OFF	2017/07/20 19:44
S248	496	industrial near3 scientific near3 radio near3 band	US-PGPUB	OR	OFF	2017/07/20 19:44
S249	1	(industrial near3 scientific near3 radio near3 band) near5 WAN	US-PGPUB	OR	OFF	2017/07/20 19:45
S250	3	(industrial near3 scientific near3 radio near3 band) with WAN	US-PGPUB	OR	OFF	2017/07/20 19:46
S251	0	(industrial near3 scientific near3 radio near3 band) near5 internet	US-PGPUB	OR	OFF	2017/07/20 19:46
S252	14	(industrial near3 scientific near3 radio near3 band) near5 network	US-PGPUB	OR	OFF	2017/07/20 19:46
S253	1	S236 and (WAN with antenna)	US-PGPUB	OR	OFF	2017/07/20 19:56
S254	1	S236 and (WAN with modem)	US-PGPUB	OR	OFF	2017/07/20 19:59
S255	1	(US-20130201316-$).did.	US-PGPUB	OR	OFF	2017/07/20 20:19
S256	157	(BINDER and Yehuda).in.	USPAT	OR	OFF	2017/07/20 20:26
S257	10	(MAYTAL and Benjamin).in.	USPAT	OR	OFF	2017/07/20 20:26
S258	4181	H04L67/12.cpc.	USPAT	OR	OFF	2017/07/20 20:27
S259	41	(B60Y2200/30 G06Q2240/00).cpc.	USPAT	OR	OFF	2017/07/20 20:29
S260	41	(B60Y2200/30 or G06Q2240/00).cpc.	USPAT	OR	OFF	2017/07/20 20:29
S261	15	(B60Y2200/30).cpc.	USPAT	OR	OFF	2017/07/20 20:29
S262	26	(G06Q2240/00).cpc.	USPAT	OR	OFF	2017/07/20 20:29
S263	5119	(G01C21/00 or B60Y2200/90 or B60Y2200/50 or B60Y2200/40 or G08G1/00 or B60Y2200/13 or B60Y2200/126 or B60Y2200/12 or B60Y2200/11 or B60K31/18 or B60K31/00 or G07C5/008).cpc.	USPAT	OR	OFF	2017/07/20 20:31
S264	10730	(348/77 or 348/143 or 370/276 or 700/22 or 700/28 or 701/2 or 701/31.4 or 709/218).ccls.	USPAT	OR	OFF	2017/07/20 20:33
S265	11	(may and patents).as.	USPAT	OR	OFF	2017/07/20 20:33

S266	6	(may and patents).aanm.	USPAT	OR	OFF	2017/07/20 20:34
S267	0	"15657163"	US-PGPUB; USPAT	ADJ	ON	2017/09/18 11:52
S268	11	(US-20160062330-$ or US-20090198380-$ or US-20160344745-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20120079149-$).did.	US-PGPUB	OR	ON	2017/09/18 12:22
S269	7	S268 and voice	US-PGPUB; USPAT	OR	ON	2017/09/18 12:22
S270	8	S268 and (audio or human)	US-PGPUB; USPAT	OR	ON	2017/09/18 12:23
S271	42	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-20130308581-$ or US-20110118888-$ or US-20120079149-$ or US-20080031139-$ or US-20080068156-$ or US-20080307075-$ or US-20170111158-$ or US-20090224906-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	OR	ON	2017/09/18 12:24
S272	25	S271 and voice	US-PGPUB; USPAT	OR	ON	2017/09/18 12:25
S273	2	S271 and ((mic or microphone) with voice)	US-PGPUB; USPAT	OR	ON	2017/09/18 12:27
S274	31	S271 and (person or human)	US-PGPUB; USPAT	OR	ON	2017/09/18 12:38
S275	17	(control$4 or operat$4) with (actuator with (human) with voice)	US-PGPUB; USPAT	OR	ON	2017/09/18 12:43
S276	7612	(control$4 or operat$4) with (actuator with voice)	US-PGPUB; USPAT	OR	ON	2017/09/18 12:55
S277	5	(control$4 or operat$4) NEAR9 (actuator with voice) NEAR9 network	US-PGPUB;	OR	ON	2017/09/18 12:55

			USPAT			
S278	10	2009/0089065	US-PGPUB; USPAT	OR	ON	2017/09/19 13:03
S279	2	"20090089065"	US-PGPUB; USPAT	OR	ON	2017/09/19 13:03
S280	13	(US-20160062330-$ or US-20090198380-$ or US-20160344745-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20120079149-$ or US-20080307075-$ or US-20090089065-$).did.	US-PGPUB	OR	ON	2017/09/19 13:12
S281	6	S280 and building	US-PGPUB; USPAT	OR	ON	2017/09/19 13:12
S282	0	"15657163"	US-PGPUB; USPAT	OR	ON	2017/09/19 13:13
S286	2	"13733634"	US-PGPUB; USPAT	ADJ	ON	2017/09/19 13:13
S287	0	S286 and (client adj2 device)	US-PGPUB; USPAT	ADJ	ON	2017/09/19 13:13
S288	5	S280 and ((speech or voice) with (command$4 or control$4))	US-PGPUB; USPAT	OR	ON	2017/09/19 13:17
S289	13	(US-20160062330-$ or US-20090198380-$ or US-20160344745-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20120079149-$ or US-20080307075-$ or US-20090089065-$).did.	US-PGPUB	OR	ON	2017/09/27 04:43
S290	7	S289 and (mic or microphone)	US-PGPUB; USPAT	OR	ON	2017/09/27 04:43
S291	13	(US-20160062330-$ or US-20090198380-$ or US-20160344745-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20120079149-$ or US-20080307075-$ or US-20090089065-$).did.	US-PGPUB	OR	ON	2017/09/28 01:25
S292	7	S291 and (mic or microphone or micro$1phone)	US-PGPUB; USPAT	OR	ON	2017/09/28 01:25
S293	43	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$	US-PGPUB; USPAT	OR	ON	2017/09/28 08:46

		or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-20130308581-$ or US-20110118888-$ or US-20120079149-$ or US-20080031139-$ or US-20080068156-$ or US-20080307075-$ or US-20170111158-$ or US-20090224906-$ or US-20090089065-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.				
S294	3281126	S293 and ("same" NEAR4 device) or inside	US-PGPUB; USPAT	OR	ON	2017/09/28 08:46
S295	3281126	S293 and ("same" NEAR4 device) or inside	US-PGPUB; USPAT	OR	ON	2017/09/28 08:46
S296	28	S293 and (("same" NEAR4 device) or inside)	US-PGPUB; USPAT	OR	ON	2017/09/28 08:47
S297	13	(US-20160062330-$ or US-20090198380-$ or US-20160344745-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20120079149-$ or US-20080307075-$ or US-20090089065-$).did.	US-PGPUB	OR	ON	2017/09/28 08:51
S298	5	S297 and actuator	US-PGPUB; USPAT	OR	ON	2017/09/28 08:51
S299	7	S297 and algorithm	US-PGPUB; USPAT	OR	ON	2017/09/28 09:06
S300	13	S297 and sensor	US-PGPUB; USPAT	OR	ON	2017/09/28 09:28
S301	3	S297 and (sensor with light)	US-PGPUB; USPAT	OR	ON	2017/09/28 09:39
S302	3	(US-20070283005-$ or US-20090089065-$ or US-20150046582-$).did.	US-PGPUB	OR	ON	2017/09/29 04:46
S303	1	S302 and (actuator with physical)	US-PGPUB; USPAT	OR	ON	2017/09/29 04:47
S304	2	S302 and (actuator)	US-PGPUB; USPAT	OR	ON	2017/09/29 04:47
S305	13	(US-20160062330-$ or US-20090198380-$ or US-20160344745-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-	US-PGPUB	OR	ON	2017/09/29 04:53

		20130091279-$ or US-20090224906-$ or US-20120079149-$ or US-20080307075-$ or US-20090089065-$).did.				
S306	7	S305 and (mic or microphones)	US-PGPUB; USPAT	OR	ON	2017/09/29 04:53
S307	10	S305 and (address)	US-PGPUB; USPAT	OR	ON	2017/09/29 05:22
S308	6	S305 and (zigbee)	US-PGPUB; USPAT	OR	ON	2017/09/29 05:30
S309	5	S305 and ("802.11")	US-PGPUB; USPAT	OR	ON	2017/09/29 05:33
S310	4	S305 and (ISM)	US-PGPUB; USPAT	OR	ON	2017/09/29 05:45
S311	2	S305 and (CDMA)	US-PGPUB; USPAT	OR	ON	2017/09/29 05:48
S312	3	S305 and (UMTS or GSM)	US-PGPUB; USPAT	OR	ON	2017/09/29 05:49
S313	8	S305 and cellular	US-PGPUB; USPAT	OR	ON	2017/09/29 05:49
S314	6	S305 and (HSPA or LTE or MBWA or "802.2" or GSM or WiMax)	US-PGPUB; USPAT	OR	ON	2017/09/29 05:54
S315	1	S305 and (applicance or freezer or refrigerator or food or beverage or coffee or tea or cooker or oven)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:23
S316	43	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-20130308581-$ or US-20110118888-$ or US-20120079149-$ or US-20080031139-$ or US-20080068156-$ or US-20080307075-$ or US-20170111158-$ or US-20090224906-$ or US-20090089065-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	OR	ON	2017/09/29 06:26
S317	14	S316 and (applicance or freezer or refrigerator or food or beverage or coffee	US-PGPUB;	OR	ON	2017/09/29 06:26

		or tea or cooker or oven)	USPAT			
S318	1015	network with sensor with (applicance or freezer or refrigerator or food or beverage or coffee or tea or cooker or oven)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:28
S319	22	S316 and (appliance or freezer or refrigerator or food or beverage or coffee or tea or cooker or oven)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:28
S320	21	S316 and (appliance or kitchen)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:29
S321	3	S316 and (kitchen)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:29
S322	12	(control$4) with network with kitchen with appliance with (speech or voice)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:33
S323	1	(US-20170272316-$).did.	US-PGPUB	OR	ON	2017/09/29 06:36
S324	12	(US-20160062330-$ or US-20090198380-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20080307075-$ or US-20090089065-$ or US-20170272316-$).did.	US-PGPUB	OR	ON	2017/09/29 08:34
S325	3	S324 and (infrared or infra$1red or gamma or xrays or x$1rays)	US-PGPUB; USPAT	OR	ON	2017/09/29 08:34
S326	0	S324 and (actuat$4 with motion)	US-PGPUB; USPAT	OR	ON	2017/09/29 08:40
S327	4	S324 and (actuat$4)	US-PGPUB; USPAT	OR	ON	2017/09/29 08:41
S328	2	S324 and (actuat$4 with (sound or noise or volume or radio or music))	US-PGPUB; USPAT	OR	ON	2017/09/29 08:49
S329	2	S324 and (actuat$4 with (sound or noise or volume or audio or radio or music))	US-PGPUB; USPAT	OR	ON	2017/09/29 08:49
S330	4	S324 and (actuat$4 same (sound or noise or volume or audio or radio or music))	US-PGPUB; USPAT	OR	ON	2017/09/29 08:49
S331	0	"15657163"	US-PGPUB; USPAT	OR	ON	2017/09/29 09:02
S332	5777	709/218.ccls.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:03
S333	12682	H04L67/12.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:03
S334	25214	B60K 31/00.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:04
S335	25214	B60K 31/18.cpc.	US-	OR	ON	2017/09/29

			PGPUB; USPAT			09:04
S336	288	B60Y2200/11.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:04
S337	862	B60Y2200/12.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:04
S338	194	B60Y2200/126.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:04
S339	313	B60Y2200/13.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
S340	35	B60Y2200/30.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
S341	110	B60Y2200/40.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
S342	13	B60Y2200/50.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
S343	91	B60Y2200/90.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
S344	36907	G01C 21/00.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
S345	155	G06Q2240/00.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
S346	9132	G07C 5/008.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
S348	15985	G08G 1/00.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
S349	40	(may and patents).as.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:07
S350	42	(may and patents).aanm.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:07
S351	381	(binder and yehuda).in.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:07
S352	39	(maytal and benjamin).in.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:07

EAST Search History (Interference)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	15657163
Filing Date	2017-07-23
First Named Inventor	Yehuda Binder
Art Unit	2456
Examiner Name	KHAN, HASSAN ABDUR-RAHMAN
Attorney Docket Number	BINDER-014-US3

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	1	20080307075	A1	2008-12-11	Urano; Takehiro ; et al.	
	2	20090089065	A1	2009-04-02	Buck; Markus ; et al.	
	3	20170272316	A1	2017-09-21	Johnson; Michael W. ; et al.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	15657163
	Filing Date	2017-07-23
	First Named Inventor	Yehuda Binder
	Art Unit	2456
	Examiner Name	KHAN, HASSAN ABDUR-RAHMAN
	Attorney Docket Number	BINDER-014-US3

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Examiner Signature		Date Considered	

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

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	15657163
	Filing Date	2017-07-23
	First Named Inventor	Yehuda Binder
	Art Unit	2456
	Examiner Name	KHAN, HASSAN ABDUR-RAHMAN
	Attorney Docket Number	BINDER-014-US3

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☒ See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	2017-11-26
Name/Print	Yehuda Binder	Registration Number	73612

This collection of information is required by 37 CFR 1.97 and 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 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

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Electronic Acknowledgement Receipt

EFS ID:	31069590
Application Number:	15657163
International Application Number:	
Confirmation Number:	1088
Title of Invention:	SYSTEM AND METHOD FOR SERVER-BASED CONTROL
First Named Inventor/Applicant Name:	Yehuda BINDER
Customer Number:	131926
Filer:	Yehuda Binder
Filer Authorized By:	
Attorney Docket Number:	BINDER-014-US3
Receipt Date:	29-NOV-2017
Filing Date:	23-JUL-2017
Time Stamp:	06:22:52
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	Information Disclosure Statement (IDS) Form (SB08)	IDS7.pdf	1035195 edcab36aeda141668a367c7be67d564b82b57999	no	4

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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.

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
15/657,163	07/23/2017	Yehuda BINDER	BINDER-014-US3

CONFIRMATION NO. 1088

131926
May Patents Ltd. c/o Dorit Shem-Tov
P.O.B 7230
Ramat-Gan, 5217102
ISRAEL

PUBLICATION NOTICE



Title:SYSTEM AND METHOD FOR SERVER-BASED CONTROL

Publication No.US-2017-0331899-A1
Publication Date:11/16/2017

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Public Records Division. The Public Records Division can be reached by telephone at (571) 272-3150 or (800) 972-6382, by facsimile at (571) 273-3250, by mail addressed to the United States Patent and Trademark Office, Public Records Division, Alexandria, VA 22313-1450 or via the Internet.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: BINDER-014-US3

In re Application of:	)	Confirmation No. 1088
	)	
Yehuda BINDER	)	Art Unit: 2456
	)	
Appln. No.: 15/657,163	)	Examiner: Khan, Hassan A.
	)	
Filed: July 23, 2017	)	Washington, D.C.
	)	
For: System and method for Server-based control	)	October 17, 2017
	)	

AMENDMENT:

Honorable Commissioner for Patents
U.S. Patent and Trademark Office
Randolph Building, Mail Stop Amendments
401 Dulany Street
Alexandria, VA 22314

Sir:

In response to the examiner's action dated October 5, 2017 (hereinafter the "**Action**"), kindly amend the above-identified application as follows:

Amendments to the Claims appear in the Listing of Claims that begins on page 2 of this paper, and

Remarks / Comments begin on page 8 of this paper.

Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for operating an actuator in a controlled device in response to captured human voice data, for use with a client device in a building communicating over a wireless network and an Internet-connected server device external to the building, the method comprising:

capturing, by a microphone in the client device, the human voice data;

sending to the server, by the client device via the wireless network, the captured human voice data;

receiving, by the server over the Internet, the captured human voice data;

processing, by the server, the captured human voice data;

responsive to the processing, sending a message, by the server to the client over the Internet;

receiving, by the controlled device via the wireless network, the message; and

operating the actuator in the controlled device in response to the received message.

2. (Original) The method according to claim 1, wherein the controlled device is part of, integrated with, or the same as, the client device.

3. (Original) The method according to claim 1, wherein the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person.

4. (Currently amended) The method according to claim 1, wherein the client device further comprises a sensor that outputs

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sensor data that responds to a physical phenomenon, ~~and~~ wherein the method further comprising sending to the server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data.

5. (Currently amended) The method according to claim 4, wherein the sensor is a thermoelectric sensor that responds to a temperature or to a temperature gradient of an object using conduction, convection, or radiation, wherein the sensor is a photoelectric sensor that responds to a visible or an invisible light, the invisible light is infrared, ultraviolet, X-rays, or gamma rays, wherein the photoelectric sensor is based on the photoelectric or photovoltaic effect, and ~~consists of, or~~ comprises~~,~~ a semiconductor component that ~~consists of, or~~ comprises~~,~~ a photodiode, a phototransistor, or a solar cell, or wherein the photoelectric sensor is based on Charge-Coupled Device (CCD) or a Complementary Metal-Oxide Semiconductor (CMOS) element.

6. (Original) The method according to claim 1, wherein the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon.

7. (Original) The method according to claim 6, wherein the physical phenomenon comprises temperature, humidity, pressure, audio, vibration, light, motion, sound, proximity, flow rate, electrical voltage, or electrical current.

8. (Original) The method according to claim 1, wherein the client device comprises multiple microphones, and wherein the capturing comprises capturing, by the multiple microphones in the client device, the human voice data.

9. (Original) The method according to claim 8, wherein the multiple microphones are arranged as a directional microphones array operative to estimate a number, magnitude, frequency,

Direction-Of-Arrival (DOA), distance, or speed of a phenomenon impinging the microphones array.

10. (Currently amended) The method according to claim 1, wherein the microphone is an omnidirectional, unidirectional, or bidirectional microphone that is based on the sensing an incident sound based motion of a diaphragm or a ribbon, or wherein the microphone ~~consists of, or~~ comprises~~,~~ a condenser, an electret, a dynamic, a ribbon, a carbon, or a piezoelectric microphone.

11. (Original) The method according to claim 1, wherein the client device or the controlled device are addressable in the wireless network or the Internet using distinct locally administered addresses or a universally administered digital addresses stored in a volatile or non-volatile memory of the respective device and uniquely identifying the respective device in the network.

12. (Original) The method according to claim 11, wherein the digital address is a MAC layer address that is MAC-48, EUI-48, or EUI-64 address type or wherein the digital address is a layer 3 address and is static or dynamic IP address that is IPv4 or IPv6 type address.

13. (Original) The method according to claim 1, wherein the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, or Z-Wave™ standards.

14. (Original) The method according to claim 1, wherein the wireless network is a Wireless LAN (WLAN) that is according to, or base on, IEEE 802.11-2012, IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, or IEEE 802.11ac.

15. (Original) The method according to claim 1, wherein the wireless network uses a wireless communication over a licensed or an unlicensed radio frequency band, that is an Industrial, Scientific and Medical (ISM) radio band.

16. (Currently amended) The method according to claim 1, wherein the wireless network is a cellular telephone network that is a Third Generation (3G) network that uses UMTS W-CDMA, UMTS HSPA, UMTS TDD, CDMA2000 1xRTT, CDMA2000 EV-DO, or GSM EDGE-Evolution, ~~or~~ and wherein the cellular telephone network is a Fourth Generation (4G) network that uses HSPA+, Mobile WiMAX, LTE, LTE-Advanced, MBWA, or is based on IEEE 802.20-2008.

17. (Currently amended) The method according to claim 1, wherein the client device or the controlled device is integrated in, is part ~~or~~ of, or is entirely included in, an appliance.

18. (Original) The method according to claim 17, wherein the primary functionality of the appliance is associated with food storage, handling, or preparation.

19. (Original) The method according to claim 18, wherein the primary function of the appliance is heating food, and wherein the appliance is a microwave oven, an electric mixer, a stove, an oven, or an induction cooker.

20. (Original) The method according to claim 18, wherein the appliance is a refrigerator, a freezer, a food processor, a dishwashers, a food blender, a beverage maker, a coffeemaker, or an iced-tea maker.

21. (Currently amended) The method according to claim 17, wherein the primary function of the appliance is associated with environmental control, and the appliance ~~consists of, or~~ is part of~~,~~ an HVAC system.

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22. (Original) The method according to claim 21, wherein the primary function of the appliance is associated with temperature control, and wherein the appliance is an air conditioner or a heater.

23. (Original) The method according to claim 17, wherein the primary function of the appliance is associated with cleaning, wherein the appliance primary function is associated with clothes cleaning and the appliance is a washing machine or a clothes dryer, or wherein the appliance is a vacuum cleaner.

24. (Original) The method according to claim 17, wherein the appliance is an answering machine, a telephone set, a home cinema system, a HiFi system, a CD or DVD player, an electric furnace, a trash compactor, a smoke detector, a light fixture, or a dehumidifier.

25. (Original) The method according to claim 1, wherein the actuator is an electric light source for converting electrical energy into light that emits visible or non-visible light for illumination or indication, and the non-visible light is infrared, ultraviolet, X-rays, or gamma rays.

26. (Currently amended) The method according to claim 25, wherein the electric light source ~~consists of, or~~ comprises~~,~~ a lamp, an incandescent lamp, a gas discharge lamp, a fluorescent lamp, a Solid-State Lighting (SSL), a Light Emitting Diode (LED), an Organic LED (OLED), a polymer LED (PLED), or a laser diode.

27. (Original) The method according to claim 1, wherein the actuator is a motion actuator that causes linear or rotary motion.

28. (Original) The method according to claim 1, wherein the actuator is a sounder for converting an electrical energy to omnidirectional, unidirectional, or bidirectional pattern emitted, audible or inaudible, sound waves.

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29. (Original) The method according to claim 28, wherein the sounder comprises an electromagnetic loudspeaker, a piezoelectric speaker, an electrostatic loudspeaker (ESL), a ribbon or planar magnetic loudspeaker, or a bending wave loudspeaker, or wherein the sounder comprises an electric bell, a buzzer (or beeper), a chime, a whistle or a ringer.

30. (Original) The method according to claim 28, wherein the operating of the actuator comprises playing digital audio content that is pre-recorded or synthesized, or wherein the operating of the actuator comprises simulating the voice of a human being or generating music, or wherein the operating of the actuator comprises sounding a syllable, a word, a phrase, a sentence, a short story, or a long story, using male or female voice.

REMARKS / COMMENTS

The examiner's action dated October 5, 2017 ("Action"), has been received and its contents carefully noted. The detailed rejection is appreciated. The rejections are traversed for reasons to be presented below.

Claims 5, 10, 21 and 26 are amended to overcome the rejection in section 8 of the Action.

Office Action, section 9 pages 4-5

Claims 1-30 are rejected under pre-AIA 35 U.S.C. 101 as being directed to a judicial exception.

It is respectfully submitted that these claims are not directed to a judicial exception at least because the claim limitations include various tangible and physical activities, that cannot be considered as abstract. It is noted that the none examples provided in the USPTO guidelines include signal processing (such as processing human voice) and affecting a physical phenomenon based on such analysis.

First, the Action overlook various steps in claim 1 and in the various dependent claims. Second, the Action equates 'capturing the human voice data' to '*obtaining and comparing intangible data*' – A human voice cannot be considered as 'intangible data' and capturing the voice by a microphone cannot be considered as '*obtaining and comparing*' in general, and '*obtaining and comparing intangible data*' in particular. Third, the Action equates 'processing by the server' to '*collecting and comparing known information*' – A human voice cannot be considered as '*known information*', and voice processing cannot be equated to any '*collecting and comparing*' in general, and '*collecting and comparing known information*' in

particular. Further, the Action states that the invention relates to '*a storage medium, processor and instructions remaining, which are part of a general purpose computer*'. Such characterization overlooks the claimed structure of three different devices (controlled device, client device, and a server) communicating with each other in a defined way. Such a structure cannot be considered as '*general purpose computer*'.

Office Action, section 10 pages 6-24

Claims 1-4, 6-14, 16 and 27-30 are rejected under pre-AIA 35 U.S.C. 103 as being unpatentable over Beliles *et al.* (US 2007/0283005 – hereinafter "Beliles"), in view of Buck *et al.* (US 2009/0089065 – hereinafter "Buck"), and in view of Urano *et al.* (US 2008/0307075 – hereinafter "Urano").

General.

The rejection is vague and unclear since it provides no more than copied passages from the references. It is not clear how claimed elements or features are equated to elements or features in the references. It is requested that unless allowed, the next Action will be a non-final one and will clearly indicate what element in the references is equated to the recited ones.

Regarding Beliles – Non-analogous reference.

a. The primary reference upon which the Action is based in the Beliles reference. It is respectfully submitted that the Beliles reference is not in analogous field, and affectively teaches away from the claimed invention.

b. The Beliles reference is based upon for the recited limitations of "*A method … for use with a client device in a building communicating over a wireless network and an Internet-*

connected server device external to the building, …". First, this passage explicitly recites a wireless network. The Beliles reference focuses on a wired network, and the disclosure in general, and the cited paragraphs 0009, 0015-0017 in particular, are silent regarding any wireless networking.

c. The claimed invention recites, inter alia, an Internet-connected server that is **external to the building**, for processing the received microphone (sensor) data and in response controlling an actuator. First, the Beliles reference in general, and the cited paragraphs in particular, are silent regarding any device communicating over a wireless network to an 'Internet-connected server', and in particular any communication with any device external to the building. Second, the Beliles invention dictates that decisions to activate any actuator are based on a policy table 400 (see FIGs. 2 and 4) that is part of a network device **in the building.**

d. The claimed invention recites operating an actuator in response to capturing human voice, hence referring to **intentional and deliberate actuator control by a human.** In contrast, the Beliles invention focuses on security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and **for detecting unwanted problems or disasters** such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037).

Combining Beliles and Buck.

a. The Appellant submits that the Beliles and Buck references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Action does not explain, as required by the

rules, what is the reasoning behind the combining of the Beliles and Buck references, and why these references are analogous to each other. Further, it is noted that the Action does not explain if and why the Buck reference is analogous and may be combined to the Beliles reference as required by the MPEP. **If the Action is based on the reference being in the same field, it is hereby requested that the definition of the field of both the Beliles and Buck references will be included in the next Action.**

Further, the rejection is conclusory and insufficient to provide any *prima facie* burden for a rejection. Further, Section 2143.01 of the MPEP states: "*The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness.*". Hence, the stated rationale cannot be considered as "objective evidence of non-obviousness" and fails to show "… **objective reason** to combine the teachings of the references."[MPEP 2143.01 (IV)](Emphasis added), and further by using facts gleaned from the claim or the specification, the Action fails to show a conclusion that is reached "… *on the basis of the facts* ***gleaned from the prior art.***" [MPEP 2142](Emphasis added). Further, MPEP § 2145(X)(A)states that "*Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and* ***does not include knowledge gleaned only from applicant's disclosure,*** *such a reconstruction is proper, quoting In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971), (Emphasis added).*"

b. The rationale for combining is stated on top of page 9 as: "… *for the purpose of implementing the techniques for adjustment of vehicle elements through speech control*".
First, the primary reference that is modified by the Action is the Beliles reference. **However, the Beliles reference is NOT disclosing any vehicle or vehicle elements, rendering the rationale as moot.**

Further, it is respectfully submitted that the modification proposed by the examiner, and the reasoning for the modification, are the SAME in the Action, i.e.: It is trivial and inherent that ALWAYS adding ANY feature X to Beliles may be justified as "… *to combine **feature X** to … for the purpose of implementing the techniques for novel and modified apparatus having **feature X**.*".

Hence, this rationale amounts to nothing more than an unsupported and unexplained conclusory statement, while the Office cannot rely solely on common knowledge or common sense to support its findings. Further, it is settled that the Office should provide a "satisfactory explanation" for the motivation for a finding that includes an express and **"rational" connection with the evidence presented.** Furthermore, MPEP 2143 clearly states that "*Any rationale employed must provide **a link between the factual findings and the legal conclusion of obviousness.***" (Emphasis added).

c. The Beliles and Buck references are non-analogous at least because the Beliles reference discloses a system **in a building** and the Buck reference discloses a system **in a vehicle.** Further, the Beliles reference teaches security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and **for detecting unwanted problems or disasters** such as fire,

radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037), **in a stationary environment in a building.** In contrast, the Buck reference teaches away from these features by teaching **'hands free'** (paragraph 0005) operation in a **moving vehicle.**

The above is further supported by the fact that Beliles is classified under U.S. Class 709/224 relating to 'ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MULTICOMPUTER DATA TRANSFERRING - COMPUTER NETWORK MANAGING' dealing with computer network management, while Buck is classified in Class/Subclass 704/275 associated with "DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION - Speech assisted network", relating to signal processing. Handling computer networks is clearly distinct from any speech processing. It is noted that MPEP §808.02(A) explicitly recites that ***different classes "… shows that each invention has attained recognition in the art as a separate subject for inventive effort, and also a separate field of search."*** (Emphasis added).

Combining Beliles and Urano.

a. The Appellant submits that the Beliles and Urano references are directed towards respectively different fields and purposes, and are based on respectively different structures, and thus are not analogous to one another and cannot logically be combined. The Action does not explain, as required by the rules, what is the reasoning behind the combining of the Beliles and Urano references, and why these references are analogous to each other. Further, it is noted that the Action does not explain if and why the Urano reference is analogous and may be combined to the Beliles reference as required by the

MPEP. **If the Action is based on the reference being in the same field, it is hereby requested that the definition of the field of both the Beliles and Urano references will be included in the next Action.**

Further, the rejection is conclusory and insufficient to provide any *prima facie* burden for a rejection. Further, Section 2143.01 of the MPEP states: "*The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness.*". Hence, the stated rationale cannot be considered as "objective evidence of non-obviousness" and fails to show "… **objective reason** to combine the teachings of the references."[MPEP 2143.01 (IV)](Emphasis added), and further by using facts gleaned from the claim or the specification, the Action fails to show a conclusion that is reached "… *on the basis of the facts* ***gleaned from the prior art.***" [MPEP 2142](Emphasis added). Further, MPEP § 2145(X)(A)states that "*Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and* ***does not include knowledge gleaned only from applicant's disclosure,*** *such a reconstruction is proper, quoting In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971), (Emphasis added).*"

b. The rationale for combining is stated on top of page 9 as: "… *for improved energy efficiency*". First, the primary reference that is modified by the Action is the Beliles reference. The Urano reference is combined with the Beliles reference for disclosing relating to capturing by a microphone of human voice data and sending the captured human voice data. These features are not relevant to any energy consumption in

general, and to any "*improved energy efficiency*" as stated in the rationale in particular, hence this rationale for combining these references is moot.

Hence, this rationale amounts to nothing more than an unsupported and unexplained conclusory statement, while the Office cannot rely solely on common knowledge or common sense to support its findings. Further, it is settled that the Office should provide a "satisfactory explanation" for the motivation for a finding that includes an express and **"rational" connection with the evidence presented.** Furthermore, MPEP 2143 clearly states that "*Any rationale employed must provide* ***a link between the factual findings and the legal conclusion of obviousness.***" (Emphasis added).

c. The Beliles and Urano references are non-analogous at least because the Beliles reference focuses on security and safety **automatic operation without any human intervention** (see cited paragraphs 0015 and 0017, and throughout the disclosure), and **for detecting unwanted problems or disasters** such as fire, radiation, explosion, earthquake (see for example paragraphs 0016, 0017, and 0037), **in a stationary environment in a building.** In contrast, the Urano reference in general, and the cited paragraphs 0101-0104 in particular, dictate devices that are **'worn by the respective person', hence portable and human operated.**

The absence of a reply to a specific rejection, issue, or comment, does not signify agreement with that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims that have not been expressed.

Nothing in this reply should be understood as conceding any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claims does not necessarily signify concession of unpatentability to the claim before its amendment. It should further be understood that any filing of a terminal disclaimer to obviate a rejection based on nonstatutory double patenting is not an admission of the propriety of the rejection.

If the above arguments should not now place the application in the condition for allowance, the examiner is invited to call undersigned counsel to resolve any remaining issues.

Respectfully submitted,

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Amazon EX1004 Page 942

Electronic Acknowledgement Receipt	
EFS ID:	30674093
Application Number:	15657163
International Application Number:	
Confirmation Number:	1088
Title of Invention:	SYSTEM AND METHOD FOR SERVER-BASED CONTROL
First Named Inventor/Applicant Name:	Yehuda BINDER
Customer Number:	131926
Filer:	Yehuda Binder
Filer Authorized By:	
Attorney Docket Number:	BINDER-014-US3
Receipt Date:	17-OCT-2017
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Time Stamp:	10:05:49
Application Type:	Utility under 35 USC 111(a)

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Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		10-2017-NFOA-Response.pdf	239578 d8080f52efeb7603ad59c4dcf56b13cae77c14f5	yes	16

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	7
	Applicant Arguments/Remarks Made in an Amendment	8	16
Warnings:			
Information:			
	Total Files Size (in bytes):	239578	

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.

PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 15/657,163	Filing Date 07/23/2017	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 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(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	10/17/2017	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 30	Minus	** 30	= 0	X $40 =	0
	Independent (37 CFR 1.16(h))	* 1	Minus	***3	= 0	X $210 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						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.

LIE
JAMES TUNSTALL

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.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/657,163	07/23/2017	Yehuda BINDER	BINDER-014-US3	1088

131926 7590 10/05/2017

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EXAMINER	
KHAN, HASSAN ABDUR-RAHMAN	

ART UNIT	PAPER NUMBER
2456	

MAIL DATE	DELIVERY MODE
10/05/2017	PAPER

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

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 15/657,163	Applicant(s) BINDER ET AL.	
	Examiner HASSAN KHAN	Art Unit 2456	AIA (First Inventor to File) Status No

-- 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 MONTHS 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 7/23/2017.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

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

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ 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*

5)☒ Claim(s) 1-30 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) 1-30 is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

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

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

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

11)☒ The drawing(s) filed on 7/23/2017 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).

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).

Certified copies:

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)).

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

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date 7/23/17, 7/23/17, 7/23/17, 7/23/17, 7/23/17, 8/17/17.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

2. The instant application number 15/657,163 is presented for examination by the examiner.

3. This application is a continuation of 13/733,634 filed on 01/03/2013.

4. Claims 1 - 30 are pending.

Priority

5. Applicants' claim for the benefit of a prior-filed provisional Application No. 61/584,500 filed on 01/09/2012, provisional Application No. 61/620,129 filed on 04/04/2012, provisional Application No. 61/637,030 filed on 04/23/2012 and provisional Application No. 61/647,034 filed on 05/15/2012 under 35 U.S.C. 119(e) is acknowledged.

Drawings

6. The applicant's submitted drawings are acceptable for examination purposes.

Information Disclosure Statement

7. The five (5) information disclosure statements (IDS) submitted on 07/23/2017 and one submitted on 08/17/2017 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements has being considered by the examiner. It is impractical for the examiner to review the references thoroughly with the number of references cited in the case. By initialing each of the cited references on the accompanying 1449 forms, the examiner is merely acknowledging the submission of the cited references and merely indicating that only a cursory review is made of the cited references.

An applicant's duty of disclosure of material and information is not satisfied by presenting a patent examiner with "a mountain of largely irrelevant [material] from which he is presumed to have been able, with his expertise and with adequate time, to have found the critical [material]. It ignores the real world

conditions under which examiners work." Rohm & Haas Co. v. Crystal Chemical Co., 722 F.2d 1556, 1573 [220 USPQ 289] (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) (Emphasis in original). Patent applicant has a duty not just to (disclose pertinent prior art references but to make a disclosure in such way as not to "bury" it within other disclosures of less relevant prior art; See Golden Valley Microwave Foods Inc. v. Weaver Popcorn Co. Inc., 24 USPQ2d 1801 (N.D Ind. 1992); Molins PLC v. Textron Inc., 26 USPQ2d 1889, at 1899 (D.Del. 1992); Penn Yan Boats, Inc. v. Sea Lark Boats, Inc. et al., 175 USPQ 260, at 272 (S.D. Fl- 1972).

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(b):

> (b) CONCLUSION. — The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

8. **Claims 5, 10, 21 and 26** are rejected under 35 U.S.C. 112(b), as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor regards as the invention. Claims 5, 10, 21 and 26 uses the phrase *'consists of, or comprises'* or *'consists of, or is part of'*, however these Markush claims present uncertainty and ambiguity with respect to the question of scope and clarity of the claims - MPEP 2173.05(h). These Markush groups are so expansive that one skilled in the art cannot determine the metes and bounds of the claimed invention. For examination purposes, the Examiner would consider the alternative limitation of *comprises* or *in part of*.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. **Claims 1 - 30** are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

Subject Matter Eligibility Standard

When considering subject matter eligibility under 35 U.S.C. 101, it must be determined whether the claim is directed to one of the four statutory categories of invention, i.e., process, machine, manufacture, or composition of matter. If the claim does fall within one of the statutory categories, it must then be determined whether the claim is directed to a judicial exception (i.e., law of nature, natural phenomenon, and abstract idea), and if so, it must additionally be determined whether the claim is a patent-eligible application of the exception. If an abstract idea is present in the claim, any element or combination of elements in the claim must be sufficient to ensure that the claim amounts to significantly more than the abstract idea itself. Examples of abstract ideas include fundamental economic practices; mathematical concepts and relationships such as mathematical formulas, and calculations; certain methods of organizing human activities; and an idea itself, such as obtaining and comparing intangible data, comparing new and stored information, and an idea standing alone such as an un-instantiated concept, plan or scheme; Alice Corporation Pty. Ltd. v. CLS Bank International, et al. 573 U.S. 2014.

Analysis

In the instant case, Claims 1 - 30 are directed to a method. Additionally, the claims are directed to a method for operating an actuator in a controlled device in response to captured human voice data. The steps include capturing the human voice data (*obtaining and comparing intangible data, CyberSource),* processing by the server, the captured human voice data *(collecting and comparing known information, Classen)* and responsive to the processing, sending a message *(collecting information, analyzing it and notifying a user, FairWarning),* all of which is considered to be an abstract idea of itself as the entire activity is about voice recognition and voice based controls. All the claim limitations are in its entirety makes up he abstract idea, leaving nothing but a storage medium, processor and instructions remaining, which are part of a general purpose computer, and therefore do not amount to significantly more than the

abstract idea itself. The invention lacks any patentable material rather it does something which is already well-known in the art, and that is collecting and comparing known information (capturing human voice) and using rules to identify options (i.e. to recognize the human voice command(s) and to execute the associated tasks). The elements of the instant process, when taken alone, each execute in a manner routinely and conventionally expected of these elements. The elements of the product, when taken in combination, together do not offer substantially more than the sum of the functions of the elements when each is taken alone. That is, the elements involved in the recited method undertake their roles in performance of their activities according to their generic functionalities. The elements together execute in routinely and conventionally accepted coordinated manners and interact with their partner elements to achieve an overall outcome which, similarly, is merely the combined and coordinated execution of generic computer functionalities which are well-understood, routine and conventional activities previously known to the industry.

Conclusion

The claims do not amount to significantly more than the abstract idea itself. This is because the claims do not affect an improvement to another technology or technical field; the claims do not amount to an improvement to the functioning of a general purpose communication system itself; and the claim does not move beyond explaining the use of an abstract idea (already known to those skilled in the art) to a particular technological environment. Accordingly, the Examiner concludes that there are no meaningful limitations in the claim that transform the judicial exception into a patent eligible application such that the claim amounts to significantly more than the judicial exception itself. Note: The analysis above applies to all statutory categories of invention.

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 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 negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims the examiner presumes that the subject matter of the various claims was commonly owned as of the effective filing date of the claimed invention(s) absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and effective filing dates of each claim that was not commonly owned as of the effective filing date of the later invention in order for the examiner to consider the applicability of 35 U.S.C. 102(b)(2)(C) for any potential 35 U.S.C. 102(a)(2) prior art against the later invention.

10. Claims 1 - 4, 6 – 14, 16 and 27 - 30 are rejected under 35 U.S.C. 103 as being unpatentable over US Patent Application Publication No. 2007/0283005 to Beliles et al. (hereinafter Beliles), in view of US Patent Application Publication No. 2009/0089065 to Buck et al. (hereinafter Buck) and in view of US Patent Application Publication No. 2008/0307075 to Urano et al. (hereinafter Urano).

Regarding Claim 1, Beliles discloses (in ¶0004) a method and system for dynamically responding to non-network events at a network device in a computer network that further includes:

a method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising; Beliles discloses (in ¶0015) one or more sensors automatically detect (sense) one or more non-network events, and notifications of the non-network events are then transmitted over the network. Beliles discloses (in ¶0009 and ¶0016) that the sensors, or notably network-attached sensor translators, transmit the notification of the non-network event (e.g., as data packets/frames) on the network to one or more destination devices, such as a central monitoring system and/or control center (e.g. a proprietary alarm system, security center etc.). The physical sensors offer the capability to attach to computer networks for communication purposes. For instance, rather than providing a set of system-specific or proprietary communication lines within a building, many physical sensor systems are connected to the computer network already in place. The monitoring/control system may then dynamically respond to the physical (non-network) events, or a system administrator may manually respond. The network device may notify a network-attached physical control device control one or more physical parameters, for example, to protect the network device itself (as well as people), such as, e.g., initiating a fire suppression system at the network device, possibly prior to a fire being detected (i.e., preemptively) at the network device is (in ¶0017).

Beliles does not explicitly discloses operating an actuator in a controlled device in response to captured human voice data, capturing, by a microphone in the client device, the human voice data; sending to the server, by the client device via the wireless network, the captured human voice data, receiving, by the server over the Internet, the captured human voice data; processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message. However, in an analogous art, Buck teaches:

operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data; processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the

server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message; Buck teaches (in ¶0028) a system may include a device that converts spoken words into recognizable commands. The speech recognition device 402 may interface a controller 404 such as a real-time controller that may react to events before the events become obsolete (e.g., an avoidance controller may process multiple inputs, detect risk, and provide alerts while there is still time for a user to react). In response to control signals, an actuator 406 may perform an action such as transmitting an output signal. One or more tangible or wireless vehicle buses 408 (that may interface a wireless service provider) may convey the control signals and/or actuator signals to one or more local or remote (e.g., out-of-vehicle) destinations. The speech recognition device may interpret the continuous or interrupted flow of sound that may comprise speech in real time. When a first code phrase is processed, some speech recognition controllers 404 generate and store a data file in a local or remote memory 410. When a second code phrase is recognized, the system may monitor the tangible or virtual vehicle bus 408 and store the adjustment of one or more vehicle elements read from the vehicle bus in the data file that may be retained in a local (e.g., in-vehicle) or remote (e.g., out-of-vehicle) memory 410. When a third code phrase is recognized for the first time, the data file may be tagged. In some systems, the content of the data file may be contained or nested between the tags and any attributes the tags may have. In other systems, the tag may comprise an identifier, characters, or one or more pointers that identify the address of the data file or means to implement the desired operation. When the third code phrase is articulated, the phrase may be translated into executable commands by the system that may access and actuate one or more operations that may occur when the data file is processed. The operation may adjust or activate any vehicle related system such as the position of one or more seats, one or more mirrors, or communicate or program one or more powertrain, chassis, climate, entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc.).

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising, as disclosed by Beliles,

and a method for operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data; processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message, as taught by Buck, for the purpose of implementing the techniques for adjustment of vehicle elements through speech control (Buck, ¶0003).

Beliles in view of Buck does not explicitly disclose capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data. However, in an analogous art, Urano teaches:

capturing, by a microphone in the client device, the human voice data; sending to the server, by the client device via the wireless network, the captured human voice data; Urano teaches (¶0101 - ¶0104) that the microphone detects the voice around the sensor node. These sensor nodes are each worn by the respective person: for example, the sensor node is worn by the person A, the sensor node by the person B, and so on (Fig. 19C). Each sensor node performs sensing by sensors all the time (or repeatedly at a short interval). Then each sensor node transmits the obtained data (sensing data) via the wireless communication at a given interval.

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising and a method for operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data, processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message, as disclosed by Beliles in view of Buck, and capturing, by a microphone in the client device, the human voice data; sending to the server, by the client

device via the wireless network, the captured human voice data, as taught by Urano, for the purpose of implementing the system using sensor nodes for improved energy efficiency (Urano, ¶0012).

Regarding Claim 2, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the controlled device is part of, integrated with, or the same as, the client device; Buck teaches (in ¶0028) that the controlled device (speech recognition device 402 with a controller 404 and an actuator 406) converts spoken words into recognizable commands and transmits the control signals to a local integrated device or to a remote (e.g., out of vehicle) destination.

Regarding Claim 3, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the processing comprises performing a voice recognition algorithm for identifying the voice of a specific person; Buck teaches (in ¶0020 and ¶0036) speech recognition software (i.e. an algorithm) that the speech recognition and control process may differentiate different users (e.g., multiple users) by analyzing the speech input and detect authorizations.

Regarding Claim 4, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the client device further comprises a sensor that outputs sensor data that responds to a physical phenomenon, and wherein the method further comprising sending to the server, by the client device via the wireless network, the sensor data, and wherein the message is sent by the server in response to the sensor data; Buck teaches (in ¶0028) a device that converts spoken words into recognizable commands. The speech recognition device 402 may interface a controller 404 such as a real-time controller that may react to events (e.g., an avoidance controller may process multiple inputs, detect risk, and provide alerts while there is still time for a user to react). In response to control signals, an actuator 406 may perform an action such as transmitting an output signal. One or

more tangible or wireless vehicle buses 408 (that may interface a wireless service provider) may convey the control signals and/or actuator signals to one or more local or remote (e.g., out-of-vehicle) destinations. The speech recognition device may interpret the continuous or interrupted flow of sound that may comprise speech in real time.

Regarding Claim 6, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the actuator is directly or indirectly affecting, changing, producing, or creating a physical phenomenon; Buck teaches (in ¶0032) that the speech recognition and control process may interface a physical or a wireless bus system that interfaces in-vehicle and/or out-vehicle devices and networks. The devices may provide electronic and/or mechanical adjustments (e.g., through actuators, servo-motors, sensor thresholds, visual/aural setting, etc.) that may be used to adjust mechanical (i.e. physical) and/or electronic elements and devices.

Regarding Claim 7, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 6. Further, Buck discloses:

wherein the physical phenomenon comprises temperature, humidity, pressure, audio, vibration, light, motion, sound, proximity, flow rate, electrical voltage, or electrical current; Buck teaches (in ¶0032) that the speech recognition and control process may interface a physical or a wireless bus system that interfaces in-vehicle and/or out-vehicle devices and networks. Buck teaches (in ¶0028) when the third code phrase is articulated, the phrase may be translated into executable commands by the system that may access and actuate one or more operations that may occur when the data file is processed. The operation may adjust or activate any vehicle related system such as the position of one or more seats, one or more mirrors, or communicate or program one or more powertrain, chassis, climate, entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc.). In other processes, the operation may tune a pass band of a bandwidth filter (e.g., select an audio

channel), adjust a volume level, a treble setting, a bass setting, a balance control, and/or other aural settings.

Regarding Claim 8, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the client device comprises multiple microphones, and wherein the capturing comprises capturing, by the multiple microphones in the client device, the human voice data; Buck teaches (in ¶0031) some systems interface one or more microphones or a microphone array that includes two or more directional microphones (e.g., multiple directional microphones).

Regarding Claim 9, does not teach or further define over the limitation in claim 8 respectively. Therefore claim 9 is rejected for the same rationale of rejection as set forth in claim 8.

Regarding Claim 10, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck and Urano discloses:

wherein the microphone is an omnidirectional, unidirectional, or bidirectional microphone; Buck teaches (in ¶0031) some systems interface one or more microphones or a microphone array that includes two or more directional microphones (e.g., multiple directional microphones).

that is based on the sensing an incident sound based motion of a diaphragm or a ribbon, or wherein the microphone consists of, or comprises, a condenser, an electret, a dynamic, a ribbon, a carbon, or a piezoelectric microphone; Urano teaches (in ¶0101) that microphone detects the voice around the sensor node. Examiner notes that different types of microphones are commonly known to person skilled in the art. These microphones uses different methods to convert the air pressure variations of a sound wave to an electrical signal (e.g. dynamic, condenser, piezoelectric etc.)

Regarding Claim 11, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Beliles discloses:

wherein the client device or the controlled device are addressable in the wireless network or the Internet using distinct locally administered addresses or a universally administered digital addresses stored in a volatile or non-volatile memory of the respective device and uniquely identifying the respective device in the network; Beliles teaches (in ¶0035 - ¶0039) that the network device may be a destination device of the notification message 300 (i.e., in destination address field 314), in that the sensors/translators may be configured to send the non-network event notification messages. The message 300 includes one or more headers 310 (e.g., IP/ATM headers, etc.), and a data field 320. Source address 312 and destination address 314 within the header 310 are the network addresses for the sending device (e.g., sensor translators) and the receiving device (e.g., a monitor/control system 140), respectively.

Regarding Claim 13, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the wireless network is a Wireless Personal Area Network (WPAN), that is according to, or based on, Bluetooth™ or IEEE 802.15.1-2005standards, or wherein the WPAN is a wireless control network that is according to, or based on, Zigbee™, IEEE 802.15.4-2003, orZ-Wave™ standards; Buck teaches (in ¶0052) that the speech recognition controller may be compliant with a Wi-Fi protocols or multiple protocols or subsets (e.g., ZigBee, High Speed Packet Access (e.g., High Speed Downlink Packet Access and/or High Speed Uplink Packet Access), Bluetooth, Mobile-Fi, Ultrawideband, Wi-Fi, WiMax, mobile WiMax, cellular, satellite, etc., referred to as the transceiver protocols) that may be automatically detected and selected (through a handshaking, for example, that may automatically determine the source type of the transmission e.g., by a query for example, and may attempt to match it) and may enable this automatic access through one or more communication nodes.

Regarding Claim 16, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck discloses:

wherein the wireless network is a cellular telephone network, that is a Third Generation (3G) network that uses UMTS W-CDMA, UMTS HSPA, UMTS TDD, CDMA2000 lxRTT, CDMA2000 EV-DO, or GSM EDGE-Evolution, or wherein the cellular telephone network is a Fourth Generation (4G) network that uses HSPA+, Mobile WiMAX, LTE, LTE-Advanced, MBWA, or is based on IEEE 802.20-2008; Buck teaches (in ¶0052) a cellular or wireless protocol, a wireless or cellular telephone, a radio, a satellite, or other wireless communication system may link the speech recognition controller 404 transceivers 414 to a privately accessible or publicly accessible distributed network or directly to an intermediate surrogate. The system may be complaint with WiMax or IEEE 802.16a or may have a frequency band within a range of about 2 to about 11 GHz, a range of about 31 miles, and a data transfer rate of about 70 Mbps. In other applications, the speech recognition controller may be compliant with a Wi-Fi protocols or multiple protocols or subsets (e.g., ZigBee, High Speed Packet Access (e.g., High Speed Downlink Packet Access and/or High Speed Uplink Packet Access), Bluetooth, Mobile-Fi, Ultrawideband, Wi-Fi, WiMax, mobile WiMax, cellular, satellite, etc., referred to as the transceiver protocols) that may be automatically detected and selected and may enable this automatic access through one or more communication nodes.

Regarding Claim 27, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck teaches:

wherein the actuator is a motion actuator that causes linear or rotary motion; Buck teaches (¶0028) that the speech command may access and actuate one or more operations that may occur when the data file is processed. The operation may adjust or activate any vehicle related system such as the position of one or more seats (i.e. mechanically moving the seat), one or more mirrors (i.e. mechanically moving the mirrors) or communicate or program one or more powertrain, chassis, climate, entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc.).

Regarding Claim 28, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Buck teaches:

wherein the actuator is a sounder for converting an electrical energy to omnidirectional, unidirectional, or bidirectional pattern emitted, audible or inaudible, sound waves; Buck teaches (¶0028) that the speech command may access and actuate one or more operations that may occur when the data file is processed. The operation may adjust or activate any vehicle related system such as entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc. The operation may tune a pass band of a bandwidth filter (e.g., select an audio channel), adjust a volume level, a treble setting, a bass setting, a balance control, and/or other aural settings.

Regarding Claim 29, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 28. Further, Buck teaches:

wherein the sounder comprises an electromagnetic loudspeaker, a piezoelectric speaker, an electrostatic loudspeaker (ESL), a ribbon or planar magnetic loudspeaker, or a bending wave loudspeaker, or wherein the sounder comprises an electric bell, a buzzer (or beeper), a chime, a whistle or a ringer; Buck teaches (¶0028) that the speech command may access and actuate one or more operations that may occur when the data file is processed. The operation may adjust or activate any vehicle related system such as entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc. The operation may tune a pass band of a bandwidth filter (e.g., select an audio channel), adjust a volume level, a treble setting, a bass setting, a balance control, and/or other aural settings.

Regarding Claim 30, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 28. Further, Buck teaches:

wherein the operating of the actuator comprises playing digital audio content that is pre-recorded or synthesized, or wherein the operating of the actuator comprises simulating the voice of a human being or generating music, or wherein the operating of the actuator comprises sounding a syllable, a word, a phrase, a sentence, a short story, or a long story, using male or female voice; Buck teaches (¶0028) that the speech command may access and actuate one or more

operations that may occur when the data file is processed. The operation may adjust or activate any vehicle related system such as entertainment, or navigation devices (e.g., a radio, a media or multi-media system, a navigation system, etc. The operation may tune a pass band of a bandwidth filter (e.g., select an audio channel), adjust a volume level, a treble setting, a bass setting, a balance control, and/or other aural settings.

11. Claims 5 and 15 are rejected under 35 U.S.C. 103 as being unpatentable over US Patent Application Publication No. 2007/0283005 to Beliles, in view of US Patent Application Publication No. 2009/0089065 to Buck, in view of US Patent Application Publication No. 2008/0307075 to Urano, and further in view of US Patent Application Publication No. 2015/0046582 to Gelvin et al. (hereinafter Gelvin).

Regarding Claim 5, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 4. Further, Gelvin discloses:

wherein the sensor is a thermoelectric sensor that responds to a temperature or to a temperature gradient of an object using conduction, convection, or radiation, wherein the sensor is a photoelectric sensor that responds to a visible or an invisible light, the invisible light is infrared, ultraviolet, X-rays, or gamma rays, wherein the photoelectric sensor is based on the photoelectric or photovoltaic effect, and consists of, or comprises, a semiconductor component that consists of, or comprises, a photodiode, a phototransistor, or a solar cell, or wherein the photoelectric sensor is based on Charge-Coupled Device (CCD) or a Complementary Metal-Oxide Semiconductor (CMOS) element; Gelvin teaches (in ¶0376) Wireless Integrated Network Sensor Next Generation (WINS) that may continuously or periodically sense status, for example, temperature, shock, vibration, motion, tip, light level etc. Gelvin teaches (in ¶0287) that the Pico WINs node 4200, or sensing element, exploits micropower CMOS technology including a low light visible photodetector channel, CMOS passive IR sensor (polysilicon bolometer), and PVF.sub.2 vibration and acoustic sensor. The PicoWINS sensors reduce power dissipation with piezoelectric and optical sensors that require no voltage

or current bias. Gelvin teaches (¶0087) that the network includes nodes 802, gateway nodes 804, server 806, and web assistants or node control web or browser pages (not shown), but is not so limited. The sensor nodes 802 include any combination of actuators, sensors, signal processors, energy or power supplies, data storage devices, wireless communication devices, wireline communication devices, and self-location capabilities. The sensor nodes 802 are distributed in an environment 899 that is to be monitored or controlled. Gelvin teaches (¶0095) that the devices or functions of the network that are linked to the physical world include, but are not limited to, the sensor suite 1106, the communication devices 1108, the signal processors and storage devices 1110, the power or energy supplies 1112, and the actuation suite 1114.

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine the method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising and a method for operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data; processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message and capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data, as disclosed by Beliles in view of Buck in view of Urano, and wherein the sensor is a thermoelectric sensor that responds to a temperature or to a temperature gradient of an object using conduction, convection, or radiation, wherein the sensor is a photoelectric sensor that responds to a visible or an invisible light, the invisible light is infrared, ultraviolet, X-rays, or gamma rays, wherein the photoelectric sensor is based on the photoelectric or photovoltaic effect, and consists of, or comprises, a semiconductor component that consists of, or comprises, a photodiode, a phototransistor, or a solar cell, or wherein the photoelectric sensor is based on Charge-Coupled Device (CCD) or a Complementary Metal-Oxide Semiconductor (CMOS) element, as taught by Gelvin, for the purpose of implementing a

distributed network and Internet access to sensors, controls, and processors that are embedded in equipment, facilities, and the environment (Gelvin, ¶0004).

Regarding Claim 15, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Gelvin discloses:

wherein the wireless network uses a wireless communication over a licensed or an unlicensed radio frequency band, that is an Industrial, Scientific and Medical (ISM) radio band; Gelvin teaches (in ¶0144) nodes can communicate using a number of communication modes, including the FCC industrial, scientific, and medical (ISM) band spread spectrum channels. These channels, in addition to providing robust communication, are unlicensed, thus eliminating wireless access subscription fees for short range coverage. Power limitations, however, may affect wide area coverage, so communication over such channels may be supplemented by lower speed access over licensed channels (e.g., via cellular modems), with access mediated by the proxy.

12. Claims 12 and 14 are rejected under 35 U.S.C. 103 as being unpatentable over US Patent Application Publication No. 2007/0283005 to Beliles, in view of US Patent Application Publication No. 2009/0089065 to Buck, in view of US Patent Application Publication No. 2008/0307075 to Urano and further in view of US Patent Application Publication No. 2010/0071053 to Ansari et al. (hereinafter Ansari).

Regarding Claim 12, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 11. Beliles (¶0030 and ¶0031) that the data packets are exchanged among the network devices and network-attached devices (sensors, translators, monitor/control systems, physical control devices, etc.) of the computer network 100 using predefined network communication protocols such as the Transmission Control Protocol/Internet Protocol (TCP/IP), User Datagram Protocol (UDP), Asynchronous Transfer Mode (ATM) protocol, Frame Relay protocol, Internet Packet Exchange (IPX) protocol, etc. The network interfaces may be configured (i.e. with an IPv4 or IPv6 addresses, protocols, security, DNS,

gateway information etc.) to transmit and/or receive data using a variety of different communication protocols, including, inter alia, TCP/IP, UDP, ATM, synchronous optical networks (SONET), wireless protocols, Frame Relay, Ethernet, Fiber Distributed Data Interface (FDDI), etc. Further, Ansari discloses:

wherein the digital address is a MAC layer address that is MAC-48, EUI-48, or EUI-64 address type or wherein the digital address is a layer 3 address and is static or dynamic IP address that is IPv4 or IPv6 type address; Ansari teaches (¶0116) that the DHCP client particularly requests via a UDP/IP (User Datagram Protocol/Internet Protocol (e.g. Ipv4, Ipv6, etc.) configured connection information such as the IP address that the gateway device 10 has been dynamically assigned by a DHCP service (not shown), and/or any the subnet mask information, the gateway device should be using. The DHCP server dynamically assigns or allocates network IP addresses to subordinate client endpoints on a leased, e.g. timed basis. Ansari teaches (¶0132) that the multi-services gateway device 10 hosts the various in-home device interfaces, and facilitates the moving of information from one point to another. Some of the in-home endpoint device processing duties performed by the gateway device 10 include, but are not limited to: detecting new devices and provide IP addresses dynamically or statically; functioning as a (Network Address Translator) NAT, Router and Firewall; providing a centralized disk storage in the home; obtaining configuration files from the service management center and configuring all in-home devices. Ansari teaches (Fig. 3) the Physical/Network layer with user premises hardware components required for delivering data services (i.e. Internet connectivity) along with a separate, non-integrated managed hardware used in delivering a set of managed application services. The Network Service Provider Wide Area Network Termination Apparatus allows for a typical termination of Wide Area Network Services, such as DSL, Cable, Fiber, etc., by a network services provider.

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine the method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising and a method for operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data; processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet,

receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message and capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data, as disclosed by Beliles in view of Buck in view of Urano, and wherein the digital address is a MAC layer address that is MAC-48, EUI-48, or EUI-64 address type or wherein the digital address is a layer 3 address and is static or dynamic IP address that is IPv4 or IPv6 type address, as taught by Ansari, for the purpose of implementing the gateway device that is enabled with client programming for client-server communications using a presence and networking messaging protocol and communicate with associated endpoint devices to local and/or remote presence and networking message servers or other devices via a wide area network (Ansari, ¶0001).

Regarding Claim 14, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Ansari discloses:

wherein the wireless network is a Wireless LAN (WLAN) that is according to, or base on, IEEE 802.11-2012, IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, or IEEE 802.11ac; Ansari teaches (in ¶0096) that the connectivity may be provided by implementation of one or more USB ports (interfaces) 13, a wired Local Area Network connection such as provided by an Ethernet local area network (LAN) interface 16, or, a wireless network interface via a WiFi LAN access point 62 provided, for example, in accordance with the I.E.E.E. 802.11 b/g/n wireless or wireless network communications standard. These physical interfaces provide the required network interconnectivity for the endpoint devices to connect to the multiple application services.

13. Claims 17 - 26 are rejected under 35 U.S.C. 103 as being unpatentable over US Patent Application Publication No. 2007/0283005 to Beliles, in view of US Patent Application Publication No. 2009/0089065 to Buck, in view of US Patent Application Publication No. 2008/0307075 to Urano and further in view of US Patent Application Publication No. 2017/0272316 to Johnson et al. (hereinafter Johnson).

Regarding Claim 17, the combination of Beliles, Buck and Urano discloses all the elements with respect to claim 1. Further, Johnson teaches:

wherein the client device or the controlled device is integrated in, is part or, or is entirely included in, an appliance; Johnson teaches (¶0142) that the client device or the controlled devices are mobile, fixed, wearable, portable, integrated, cloud-based, distributed and they can be interfaced with kitchen appliances.

It would have been obvious as of the effective filing date to one of ordinary skill in the art to combine the method for use with a client device in a building communicating over a wireless network and an internet-connected server device external to the building, the method comprising and a method for operating an actuator in a controlled device in response to captured human voice data, receiving, by the server over the Internet, the captured human voice data; processing, by the server, the captured human voice data, responsive to the processing, sending a message, by the server to the client over the Internet, receiving, by the controlled device via the wireless network, the message, and operating the actuator in the controlled device in response to the received message and capturing, by a microphone in the client device, the human voice data, sending to the server, by the client device via the wireless network, the captured human voice data, as disclosed by Beliles in view of Buck in view of Urano, and wherein the client device or the controlled device is integrated in, is part or, or is entirely included in, an appliance, as taught by Johnson, for the purpose of implementing techniques for deploying and maintaining Internet-connected networked devices (Johnson, ¶0009).

Regarding Claim 18, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 17. Further, Johnson teaches:

wherein the primary functionality of the appliance is associated with food storage, handling, or preparation; Johnson teaches (¶0142) that the controlled appliances includes kitchen appliances, heating systems (such as microwaves, ovens, stoves etc.) and refrigeration systems (¶0258).

Regarding Claim 19, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 18. Further, Johnson teaches:

wherein the primary function of the appliance is heating food, and wherein the appliance is a microwave oven, an electric mixer, a stove, an oven, or an induction cooker; Johnson teaches (¶0142) that the controlled appliances includes kitchen appliances and heating systems (such as microwaves, ovens, stoves etc.)

Regarding Claim 20, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 18. Further, Johnson teaches:

wherein the appliance is a refrigerator, a freezer, a food processor, a dishwashers, a food blender, a beverage maker, a coffeemaker, or an iced-tea maker; Johnson teaches (¶0142) that the controlled appliances includes kitchen appliances, heating systems (such as microwaves, ovens, stoves etc.) and refrigeration systems (¶0258).

Regarding Claim 21, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 17. Further, Johnson teaches:

wherein the primary function of the appliance is associated with environmental control, and the appliance consists of, or is part of, an HVAC system; Johnson teaches (¶0258) that the electronic system can be an air-conditioning system, HVAC system, heating system, cooling system etc.

Regarding Claim 22, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 21. Further, Johnson teaches:

wherein the primary function of the appliance is associated with temperature control, and wherein the appliance is an air conditioner or a heater; Johnson teaches (¶0258) that the electronic system can be an air-conditioning system, HVAC system, heating system, cooling system etc.

Regarding Claim 23, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 17. Further, Johnson teaches:

wherein the primary function of the appliance is associated with cleaning, wherein the appliance primary function is associated with clothes cleaning and the appliance is a washing machine or a clothes dryer, or wherein the appliance is a vacuum cleaner; Johnson teaches (¶0013) that the IoT consumer devices includes washer/dryers that use Wi-Fi for remote monitoring etc.

Regarding Claim 24, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 17. Further, Johnson teaches:

wherein the appliance is an answering machine, a telephone set, a home cinema system, a HiFi system, a CD or DVD player, an electric furnace, a trash compactor, a smoke detector, a light fixture, or a dehumidifier; Johnson teaches (¶0142) that the electronic device may include multimedia players, video recorders, VCRs, DVRs, TVs, phone, phone systems, cellular phones, smart phone, thermostats, heating systems, climate monitoring systems, internet TV boxes, media boxes, entertainment centers, entertainment systems etc.

Regarding Claim 25, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 1. Further, Johnson teaches:

wherein the actuator is an electric light source for converting electrical energy into light that emits visible or non-visible light for illumination or indication, and the non-visible light is infrared, ultraviolet, X-rays, or gamma rays; Johnson teaches (¶0259) that the electronic device may include lighting systems or light components such as a ceiling light (¶0265), LEDs light bulb (¶0264), or some other lighting bulb/fixtures (the Examiner notes that it is well known in the art that the lighting fixtures and system uses electricity to emit visible light for illumination).

Regarding Claim 26, the combination of Beliles, Buck, Urano and Johnson discloses all the elements with respect to claim 25. Further, Johnson teaches:

wherein the electric light source consists of, or comprises, a lamp, an incandescent lamp, a gas discharge lamp, a fluorescent lamp, a Solid-State Lighting (SSL), a Light Emitting Diode (LED), an Organic LED (OLED), a polymer LED (PLED), or a laser diode; Johnson teaches that the light source may include ceiling light (¶0265), LEDs light bulb (¶0264), or some other lighting bulb/fixtures.

Conclusion

Citation of Pertinent Prior Art

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- U.S. Patent Application Publication No. 2010/0030421 to Yoshimura et al. (Vehicle Control System)
- U.S. Patent Application Publication No. 2013/0091279 to Haddad et al. (Architecture for virtualized home IP service delivery)
- U.S. Patent Application Publication No. 2009/0198380 to Friedman et al. (Methods for real-time and near real-time interactions with robots that service a facility)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HASSAN KHAN whose telephone number is (313) 446-6574 and fax number is (571) 483-7559. The examiner can normally be reached on MONDAY - THURSDAY. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Philip Chea can be reached on (571) 272-3951. 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

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/HASSAN A KHAN/

Examiner, Art Unit 2456

/PHILIP CHEA/

Supervisory Patent Examiner, Art Unit 2456

Notice of References Cited	Application/Control No. 15/657,163	Applicant(s)/Patent Under Reexamination BINDER ET AL.	
	Examiner HASSAN KHAN	Art Unit 2456	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2003/0105389 A1	06-2003	Noonan, Julianne	G06F19/3406	600/300
*	B	US-2007/0283005 A1	12-2007	Beliles; Robert P.	H04L41/0816	709/224
*	C	US-2008/0307075 A1	12-2008	Urano; Takehiro	G06F1/14	709/220
*	D	US-2009/0089065 A1	04-2009	Buck; Markus	B60R16/0373	704/275
*	E	US-2009/0198380 A1	08-2009	Friedman; Scott Justin-Marl	A47L9/009	700/259
*	F	US-2009/0224906 A1	09-2009	BALGARD; Lennart	H04L41/0809	340/539.1
*	G	US-2010/0071053 A1	03-2010	Ansari; Amir	G06Q30/04	726/12
*	H	US-2013/0091279 A1	04-2013	Haddad; Wassim	H04L12/2834	709/225
*	I	US-2013/0308581 A1	11-2013	Rofougaran; Ahmadreza (Reza)	H04L12/40013	370/329
*	J	US-2015/0046582 A1	02-2015	Gelvin; David C.	H04L67/12	709/224
*	K	US-2016/0062330 A1	03-2016	Abe; Yuuichi	G08C17/02	700/12
*	L	US-2017/0272316 A1	09-2017	Johnson; Michael W.	G06Q10/103	1/1
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
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	S					
	T					

NON-PATENT DOCUMENTS

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

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
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Art Unit	
Examiner Name	15/657,163 - GAU: 2456
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U.S.PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	5930201		1999-27-07	Cray; Benjamin A.	
	2	4351192		1982-28-09	Toda et al.	
	3	7239577		2007-03-07	Tenghamn et al.	
	4	7614305		2009-10-11	Yoshioka et al.	
	5	5511447		1996-30-04	Markle , et al.	
	6	6747258		2004-08-06	Benz et al.	
	7	5105087		1992-14-04	Jagielinski; Tomasz M.	
	8	4243631		1981-06-01	Ryerson; John D.	

EFS Web 2.1.4

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
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	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A. KHAN/
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	9	7256466		2007-14-08	Lieber et al.	
	10	7898147		2011-01-03	Grabinger et al.	
	11	3184842		1965-25-05	Maropis	
	12	4019073		1977-19-04	Vishnevsky et al.	
	13	4210837		1980-01-07	Vasiliev et al.	
	14	3433981		1969-18-03	Bollee	
	15	3436630		1969-01-04	Bollee	
	16	5965968		1999-12-10	Robert et al.	
	17	5552654		1996-03-09	Konno et al.	
	18	4496149		1985-29-01	Schwartzberg; Robert B.	
	19	4516260		1985-07-05	Breedlove et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
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	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A KHAN/
	Attorney Docket Number	BINDER-~~US (2013-07-25)~~-014-US2

	20	7414186		2008-19-08	Scarpa et al.	
	21	4968255		1990-06-11	Lee et al.	
	22	4248123		1981-03-02	Bunger et al.	
	23	4796891		1989-10-01	Milner; Ronald E.	
	24	6527611		2003-04-03	Cummings; Charles A.	
	25	4840602		1989-20-06	Rose; William J.	
	26	6132281		2000-17-10	Klitsner et al.	
	27	5349129		1994-20-09	Wisniewski et al.	
	28	7692320		2010-06-04	Lemieux; Aaron Patrick	
	29	5578877		1996-26-11	Tiemann; Jerome J.	
	30	7847421		2010-07-12	Gardner et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
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	First Named Inventor	BINDER Yehuda
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	31	7688036		2010-30-03	Yarger et al.	
	32	6473609		2002-29-10	Schwartz , et al.	
	33	7653573		2010-26-01	Hayes, Jr. et al.	
	34	6694316		2004-17-02	Langseth, et al.	
	35	7334001		2008-19-02	Eichstaedt et al.	
	36	7136482		2006-14-11	Wille; Daniel J.	
	37	7557689		2009-07-07	Seddigh et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20110061460		2011-17-03	SEEGER; JOSEPH ; et al.	
	2	20110219873		2011-15-09	OHTA; Kazunori ; et al.	

EFS Web 2.1.4

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
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	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	BINDER ~~101.(2)-US-DIV2~~ 014-US2

/HASSAN A. KHAN/

	3	20110265572		2011-03-11	Hoenes; Frank	
	4	20080257050		2008-23-10	Watanabe; Kazuaki	
	5	20100242611		2010-30-09	Terazawa; Hidehito	
	6	20070264623		2007-15-11	Wang; Wayne ; et al.	
	7	20110045523		2011-24-02	Strano; Michael S. ; et al.	
	8	20110275544		2011-10-11	Zhou; Chongwu ; et al.	
	9	20070256337		2007-08-11	Segan; Marc Howard	
	10	20070210580		2007-13-09	Roberts; Stephen ; et al.	
	11	20090024759		2009-22-01	McKibben; Michael T. ; et al.	
	12	20070214095		2007-13-09	Adams; Kenneth L. ; et al.	
	13	20080258913		2008-23-10	Busey; Andrew	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
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FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

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NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	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, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Publication "Security Guidance for Critical Areas of Focus in Cloud Computing V2.1", Prepared by the Cloud Security Alliance, December 2009 (76 pages)	☐
	2	Cisco Systems, Inc. Publication number 1-587005-001-3 (6/99), "Internetworking Technologies Handbook", Chapter 7: "Ethernet Technologies", pages 7-1 to 7-38 (38 pages)	☐
	3	The Standard Microsystems Corporation (SMSC) data-sheet "LAN91C111 10/100 Non-PCI Ethernet Single Chip MAC + PHY" Data-Sheet, Rev. 15 (02-20-04) (127 pages)	☐
	4	A data sheet 'Physical Random number generator RPG100.RPG100B' REV. 08 publication number HM-RAE106-0812, by FDK Corporation (13 pages)	☐
	5	Home Gateway Initiative (HGI) document entitled: "Home Gateway Technical Requirements: Residential Profile", Version 1.0, 29/04/2008 (125 pages)	☐
	6	Paper entitled: "Home Gateway" by Satish Gupta, Wipro Technologies, 2002 (20 pages)	☐

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
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	7	The standard "HID Usage Tables", by the USB Implementers' Forum,Version 1.12 (10/28/2004) (168 pages)	☐
	8	Publication number 1-587005-001-3 by Cisco Systems, Inc. (6/99) entitled: "Internetworking Technologies Handbook", Chapter 20: "Wireless Technologies" pages 20-1 to 20-42 (42 pages)	☐
	9	The white paper entitled: "WiGig White Paper – Defining the Future of Multi-Gigabit Wireless Communications", published by WiGig Allianoe, July 2010 (5 pages)	☐
	10	"WirelessHD Specifications Version 1.1 Overview", published by the WirelessHD consortium, May 2010 (95 pages)	☐
	11	The technical overview entitled: "Enabling Wireless uncompressed HDTV Connectivity with a Unique Video-Modem Approach" by Meir Feder, published by the AMIMON Ltd. (10 pages)	☐
	12	The article 'IEEE 802.22: An Introduction to the First Wireless Standard based on Cognitive Radios', by Carlos Cordeiro, Kiran Challapali, Dagnachew Birru, and Sai Shankar, published in the Journal of Communication, Vol. 1, No. 1, April 2006 (10 pages)	☐
	13	The presentation 'IEEE 802.22 Wireless Regional Area Networks – Enabling Rural Broadband Wireless Access Using Cognitive Radio Technology', by Apruva N. Mody and Gerald Chouinard, Doc. # IEEE 802.22 – 10/0073r03, June 2010 (16 pages)	☐
	14	The document entitled: 'Dynamic Spectrum Access In IEEE 802.22 – Based Cognitive Wireless Networks: A Game Theoretic Model for Competitive Spectrum Bidding and Pricing', by Dusit Niyato, Ekram Hossain and Zhu Han, p. 16-25, published IEEE Wireless Communication April 2009 (8 pages)	☐
	15	ECMA International white paper Ecma/TC32-TG19/2005/012 entitled: "Near Field Communication – White paper" (supersedes 2004/001) (12 pages)	☐
	16	Rohde&Schwarz White Paper 1MA182_4e entitled: "Near Field Communication (NFC) Technology and Measurements White Paper" (26 pages)	☐
	17	The Texas Instrument Application Report No. SLOA101A entitled:"Introduction to the Controller Area Network (CAN)", August 2002–Revised July 2008 (15 pages)	☐

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
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	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A KHAN/
	Attorney Docket Number	BINDER~~-ITA (2.2A)-US~~-014-US2

	18	Jan Kremer Consulting Services (JKCS) white paper entitled: "NFC - Near Field Communication – White paper" (44 pages)	☐
	19	RFC 2544 entitled: "Benchmarking Methodology for Network Interconnect Devices", March 1999 (32 pages)	☐
	20	ITU-T Y.1564 entitled: "Ethernet Service Activation Test Methodology", 03/2011 (38 pages)	☐
	21	ISO 11992-1 International Standard, "Part 1: Physical layer and data-link layer", Second edition, 2003-04-15 (28 pages)	☐
	22	"LIN Specification Package – Revision 2.2A" by the LIN Consortium, December 31, 2010 (194 pages)	☐
	23	The presentation entitled:"Introduction to On Board Diagnostics (II)" downloaded on 11/2012 from: http://groups.engin.umd.umich.edu/vi/w2_workshops/OBD_ganesan_w2.pdf (148 pages)	☐
	24	The Society of Automotive Engineers (SAE) J1962 standard, June 1992 (8 pages)	☐
	25	SAE J1850, Implementing the J1850 Protocol, D. John Oliver, Intel Corporation (15 pages)	☐
	26	SAE J1979, International Surface Vehicle Standard entitled: "E/E Diagnostic Test Modes - Equivalent to ISO/DIS 15031-5:April 30, 2002", Issued: 1991-12; Revised: 2002-04 (159 pages)	☐
	27	The ISO 15765-1 standard entitled: "Road vehicles — Diagnostics on Controller Area Networks (CAN) - Part 1: General information", First Edition, 2004-03-15 (8 pages)	☐
	28	The ISO 15765-3 standard entitled: "Road vehicles — Diagnostics on Controller Area Networks (CAN) - Part 3: Implementation of unified diagnostic services (UDS on CAN)", First Edition, 2004-10-15 (100 pages)	☐

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
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	29	J1939-11 Surface Vehicle Recommended Practice entitled: "Physical Layer, 250K bits/s, Twisted Shielded Pair", Issued: 1994-12; Revised: 1999-10 (31 pages)	☐
	30	J1939-15 Surface Vehicle Recommended Practice entitled: "Reduced Physical Layer, 250K bits/s, Un-Shielded Twisted Pair (UTP)", Issued: 2003-11 (19 pages)	☐
	31	J1939-21 Surface Vehicle Recommended Practice entitled: "Data Link Layer", Issued: 1994-07; Revised: 2001-04 (47 pages)	☐
	32	J1939-31 Surface Vehicle Recommended Practice entitled: "Network Layer", Issued: 1994-12; Revised: 2004-04 (27 pages)	☐
	33	J1939-81 Surface Vehicle Recommended Practice entitled: "Network Management", Issued: 1997-07; Revised: 2003-05 (39 pages)	☐
	34	J1939-71 Surface Vehicle Recommended Practice entitled: "Vehicle Application Layer (through December 2004)", Issued: 1994-08; Revised: 2006-06 (686 pages)	☐
	35	J1939-73 Surface Vehicle Recommended Practice entitled: "Application Layer - Diagnostics", Issued: 1996-02; Revised: 2006-09 (158 pages)	☐
	36	J1939-74 Surface Vehicle Recommended Practice entitled: "Application – Configurable Messaging", Issued: 2004-09 (36 pages)	☐
	37	J1939-75 Surface Vehicle Recommended Practice entitled: "Application Layer – Generator Sets and Industrial", Issued: 2002-12 (37 pages)	☐
	38	"EDBO/OBDII to RS-232 gateway OE90C4000", by OZEN Elekronik (25 pages)	☐
	39	SAE J2411 Surface Vehicle Recommended Practice entitled: "Single Wire CAN Network for Vehicle Applications", Issued: 2000-02 (33 pages)	☐

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15/657,163~~
	Filing Date	~~2017-07-24~~ 01
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A. KHAN/
	Attorney Docket Number	BINDER ~~127.2-US-U2~~ 014-US2

	40	ISO 11898-2, International Standard, "Road vehicles — Controller area network (CAN) — Part 2: High-speed medium access unit", First edition, 2003-12-01 (26 pages)	☐
	41	ISO 11898-4, International Standard, "Road vehicles — Controller area network (CAN) — Part 4: Time-triggered communication", First edition, 2004-08-01 (40 pages)	☐
	42	Publication by Cisco Systems, Inc. (6/99) entitled: "Internetworking Technologies Overview", Chapter 5: "Routing Basics", pages 5-1 to 5-8 (8 pages)	☐
	43	Publication by Cisco Systems, Inc. (6/99) entitled: "Internetworking Technologies Overview",Chapter 30: "Internet Protocols" pages 30-1 to 30-16 (16 pages)	☐
	44	IEEE Std 802.11a-1999(R2003), "Supplement to IEEE Standard for Information technology - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications High-speed Physical Layer in the 5 GHz Band", Reaffirmation 12 June 2003 (91 pages)	☐
	45	IEEE Std 802.11b-1999 (R2003), "Supplement to IEEE Standard for Information technology - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: Higher-Speed Physical Layer Extension in the 2.4 GHz Band", Approved 16 September 1999, Reaffirmation 12 June 2003 (96 pages)	☐
	46	IEEE Std 802.11g™-2003, "IEEE Standard for Information technology - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications Amendment 4: Further Higher Data Rate Extension in the 2.4 GHz Band" Published by IEEE on 27 June 2003 (78 pages)	☐
	47	IEEE Std 802.15.3™-2003, "IEEE Standard for Information technology - Part 15.3: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for High Rate Wireless Personal Area Networks (WPANs)", Published by IEEE on 29 September 2003 (324 pages)	☐
	48	ITU-T H.323 entitled: "Packet-based multimedia communications systems", 12/2009 (320 pages)	☐
	49	ITU-T H.264 entitled: "Advanced video coding for generic audiovisual services", 01/2012 (680 pages)	☐
	50	ITU-T G.9961 entitled: "Unified high-speed wire-line based home networking transceivers – Data link layer specification", 06/2010 (220 pages)	☐

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15793954~~
	Filing Date	~~2013-03-01~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A KHAN/
	Attorney Docket Number	BINDER ~~15A (2-15-14-US)~~ 014-US2

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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.			/HASSAN A KHAN/ 09/18/2017

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Yehuda Binder
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	BI/[illegible] KHAN/

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	~~2016-11-07~~ 2017-07-23
Name/Print	Yehuda Binder	Registration Number	73612

This collection of information is required by 37 CFR 1.97 and 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 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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Doc code :IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (08-08)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	~~13703834~~
Filing Date	~~2013-03-01~~
First Named Inventor	BINDER Yehuda
Art Unit	
Examiner Name	15/657,163 - GAU: 2456
Attorney Docket Number	~~BINDER-001-01US/HASSAN K KHAN/~~ 014-US2

U.S.PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	5724456		1998-03-03	Boyack , et al.	
	2	5781650		1998-14-07	Lobo , et al.	
	3	5812193		1998-22-09	Tomitaka , et al.	
	4	5818975		1998-06-10	Goodwin , et al.	
	5	5835616		1998-10-11	Lobo , et al.	
	6	5978519		1999-02-11	Bollman , et al.	
	7	5991456		1999-23-11	Rahman , et al.	
	8	6097470		2000-01-08	Buhr , et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15726664~~
	Filing Date	~~2015-03-01~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A KHAN/
	Attorney Docket Number	BINDER ~~131 (2-15-04-25)~~ 014-US2

	9	6101271		2000-08-08	Yamashita , et al.	
	10	6148092		2000-14-11	Qian; Richard	
	11	6151073		2000-21-11	Steinberg , et al.	
	12	6192149		2001-20-02	Eschbach , et al.	
	13	6249315		2001-19-06	Holm; Jack M.	
	14	6263113		2001-17-07	Abdel-Mottaleb , et al.	
	15	6268939		2001-31-07	Klassen , et al.	
	16	6393148		2002-21-05	Bhaskar; Ranjit	
	17	6421468		2002-16-07	Ratnakar , et al.	
	18	6438264		2002-20-08	Gallagher , et al.	
	19	6456732		2002-24-09	Kimbell , et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15/730534~~
	Filing Date	~~2015-06-01~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A KHAN/
	Attorney Docket Number	BINDER ~~ISR (2015-07-25)~~ 014-US2

	20	6459436		2002-01-10	Kumada , et al.	
	21	6504951		2003-07-01	Luo , et al.	
	22	7466866		2008-16-12	Steinberg; Eran	
	23	5047952		1991-10-09	Kramer et al.	
	24	4414537		1983-08-11	Grimes; Gary J.	
	25	7702130		2010-20-04	Sung-Ho Im et al.	
	26	7598942		2009-06-10	Underkoffler et al.	
	27	5652849		1997-29-07	Conway et al.	
	28	7289645		2007-30-10	Yamamoto et al.	
	29	7821541		2010-26-10	Delean; Bruno	
	30	5454043		1995-26-09	Freeman; William T.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	[redacted]
	Filing Date	[redacted]1
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A.KHAN/
	Attorney Docket Number	BINDER [redacted]014-US2

	31	5046022		1991-03-09	Conway et al.	
	32	6931596		2005-16-08	Gutta et al.	
	33	6967565		2005-22-11	Lingemann; Ronald R.	
	34	6549616		2003-15-04	BINDER Yehuda	
	35	6216160		2001-10-04	Dichter; Carl R.	
	36	6108331		2000-22-08	Thompson; William H.	

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code1	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20110222726		2011-15-09	Ruan; Xiang	
	2	20100211918		2010-19-08	Liang et al.	
	3	20070132725		2007-14-06	Kitaura; Masahiro	

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15/657,163~~
	Filing Date	~~2017-07-24~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A.KHAN/
	Attorney Docket Number	BINDER ~~15A (2015-17-25)~~ 014-US2

	4	20120268373		2012-25-10	GRZESIAK; Grzegorz Pawet	
	5	20100295782		2010-25-11	BINDER Yehuda	
	6	20020194383		2002-19-12	Cohen et al.	
	7	20030099228		2003-29-05	Alcock, Martin	
	8	20030062990		2003-03-04	Schaeffer, et al.	
	9	20030112965		2003-19-06	McNamara et al.	
	10	20050010954		2005-13-01	BINDER Yehuda	
	11	20020039388		2002-04-04	Smart et al.	
	12	20020060617		2002-23-05	Walbeck et al.	
	13	20050180561		2005-18-08	Hazani, et al.	
	14	20050125083		2005-09-06	Kiko, Frederick J.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15/657,163~~
	Filing Date	~~2017-07-24~~
	First Named Inventor	BINDER Yehuda
	Art Unit	~~15/657,163 - GAU: 2456~~
	Examiner Name	~~/HASSAN A KHAN/~~
	Attorney Docket Number	~~BINDER=~~014-US2

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FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	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, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
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Examiner Signature		Date Considered	

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

/HASSAN A KHAN/ 09/18/2017

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)		
	Application Number	
	Filing Date	
	First Named Inventor	Yehuda Binder
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	BINDER-044US2 /HASSAN J. KHAN/

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	~~2018-11-27~~ 2017-07-23
Name/Print	Yehuda Binder	Registration Number	73612

This collection of information is required by 37 CFR 1.97 and 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 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

Doc code :IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (08-08)
Approved for use through 08/31/2006. 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.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	~~10755034~~
Filing Date	~~2013-03-01~~
First Named Inventor	BINDER Yehuda
Art Unit	
Examiner Name	15/657,163 - GAU: 2456
Attorney Docket Number	~~BINDER.001C1 (/HASSAN A. KHAN/)~~ 014-US2

U.S.PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	5010399		1991-23-04	Goodman et al.	
	2	5621455		1997-15-04	Rogers et al.	
	3	7466844		2008-16-12	Arun Ramaswamy et al.	
	4	7213061		2007-01-05	Hite et al.	
	5	6549234		2003-15-04	Lee; Sung-Min	
	6	6844897		2005-18-01	Andersson; Anders	
	7	7342212		2008-11-03	Mentzer et al.	
	8	6476372		2002-05-11	Merrill et al.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15763664~~
	Filing Date	~~2018-03-21~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A. KHAN/
	Attorney Docket Number	BINDER-~~[illegible]~~014-US2

	9	8016205		2011-13-09	Drew; David Scot	
	10	6474138		2002-05-11	Chang et al.	
	11	5948965		1999-07-09	Upchurch, et al.	
	12	6329160		2001-11-12	Schneider et al.	
	13	4857273		1989-15-08	Stewart; William J.	
	14	6437578		2002-20-08	Gumm; Linley F.	
	15	6714021		2004-30-03	Williams; Emrys J.	
	16	6820225		2004-16-11	Johnson et al.	
	17	7716985		2010-18-05	Zhang et al.	
	18	5578755		1996-26-11	Offenberg; Michael	
	19	5962786		1999-05-10	Le Traon et al.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15703634~~
	Filing Date	~~2015-03-31~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A. KHAN/
	Attorney Docket Number	BINDER ~~P.N. (2.7.14-2)~~ 014-US2

	20	7617729		2009-17-11	Axelrod et al.	
	21	6670212		2003-30-12	McNie et al.	
	22	7892876		2011-22-02	Mehregany; Mehran	
	23	7326866		2008-05-02	Kelley, Jr. , et al.	
	24	7774155		2010-10-08	Sato et al.	
	25	4594898		1986-17-06	Kirman et al.	
	26	7047826		2006-23-05	Peshkin; Michael A.	
	27	6865953		2005-15-03	Tsukada et al.	
	28	5844146		1998-01-12	Murray et al.	
	29	5817943		1998-06-10	Welles, II et al.,	
	30	6606911		2003-19-08	Akiyama et al.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	[redacted]
	Filing Date	[redacted]
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	B[redacted]014-US2

	31	4434451		1984-28-02	Delatorre; Leroy C.	
	32	5134887		1992-04-08	Bell; Robert L.	
	33	5001453		1991-19-03	Ikejiri et al.	
	34	6840103		2005-11-01	Lee at al.	
	35	6806722		2004-19-10	Shon et al.	
	36	6895803		2005-24-05	Seakins et al.,	
	37	4873481		1989-10-10	Nelson et al.,	
	38	3213010		1965-19-10	Saunders et al.	
	39	5604595		1997-18-02	Schoen; Neil C.	
	40	7219536		2007-22-05	Liu et al.	
	41	7482732		2009-27-01	Kalantar-Zadeh; Kourosh	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	[redacted]
	Filing Date	[redacted]
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A KHAN/
	Attorney Docket Number	BINDER[redacted]014-US2

	42	4759220		1988-26-07	Burdess et al.	
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U.S.PATENT APPLICATION PUBLICATIONS						
Examiner Initial*	Cite No	Publication Number	Kind Code1	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20070112939		2007-17-05	Wilson; Brian B. ; et al.	
	2	20100201531		2010-12-08	Pakravan; Alireza ; et al.	
	3	20050247573		2005-10-11	Nakamura, Hideaki ; et al.	
	4	20070249063		2007-25-10	Deshong; Philip R. ; et al.	
	5	20040182167		2004-23-09	Orth, Kelly M. ; et al.	
	6	20100162815		2010-01-07	LEE; Sang-Hun	
	7	20090272193		2009-05-11	OKAGUCHI; Kenjiro ; et al.	
	8	20110041604		2011-24-02	Kano; Kazuhiko ; et al.	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15762864~~
	Filing Date	~~2018-03-01~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	BINDER ~~[illegible]~~ /HASSAN A. KHAN/ 014-US2

FOREIGN PATENT DOCUMENTS								
Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
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Examiner Initials*	Cite No	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, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Publication number 1-587005-001-3 by Cisco Systems, Inc. (6/99) entitled: "Internetworking Technologies Handbook", Chapter 5: "Routing Basics", pages 5-1 to 5-10 (10 pages)	☐
	2	Publication number 1-587005-001-3 by Cisco Systems, Inc. (6/99) entitled: "Internetworking Technologies Handbook", Chapter 30: "Open System Interconnection Protocols" pages 30-1 to 30-10 (10 pages)	☐
	3	Publication number 1-587005-001-3 by Cisco Systems, Inc. (6/99) entitled: "Internetworking Technologies Handbook", Chapter 32: "IPv6" pages 32-1 to 32-6 (6 pages)	☐
	4	Publication number 1-587005-001-3 by Cisco Systems, Inc. (6/99) entitled: "Internetworking Technologies Handbook", Chapter 45: "Open System Interconnection Routing Protocol", pages 45-1 to 45-8 (8 pages)	☐
	5	Publication number 1-587005-001-3 by Cisco Systems, Inc. (6/99) entitled: "Internetworking Technologies Handbook", Chapter 51: "Security Technologies" pages 51-1 to 51-12 (12 pages)	☐
	6	IBM Corporation, International Technical Support Organization Redbook Documents No. SG24-4756-00 entitled: "Local Area Network Concepts and Products: LAN Operation Systems and management", 1st Edition May 1996 (216 pages)	☐
	7	IBM Corporation, International Technical Support Organization Redbook Document No. GG24-4338-00 entitled: "Introduction to Networking Technologies", 1st Edition April 1994 (220 pages)	☐

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	[redacted]
	Filing Date	[redacted]
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	BINDER [redacted] 014-US2

/HASSAN A. KHAN/

	8	IBM Corporation, International Technical Support Organization, Redbook Document No. SG24-2580-01 "IP Network Design Guide", 2nd Edition June 1999 (324 pages)	☐
	9	IBM Corporation, International Technical Support Organization, Redbook Document No. GG24-3376-07 "TCP/IP Tutorial and Technical Overview", ISBN 0738494682 8th Edition Dec. 2006 (1004 pages)	☐
	10	A slide-show by W. Steven Conner, Intel Corp. et al. entitled: "IEEE 802.11s Tutorial" presented at the IEEE 802 Plenary, Dallas on Nov. 13, 2006 (93 pages)	☐
	11	A slide-show by Eugen Borcoci of University Politehnica Bucharest, entitled: "Wireless Mesh Networks Technologies: Architectures, Protocols, Resource Management and Applications", presented in INFOWARE Conference on August 22-29th 2009 in Cannes, France (212 pages)	☐
	12	An IEEE Communication magazine paper by Joseph D. Camp and Edward W. Knightly of Electrical and Computer Engineering, Rice University, Houston, TX, USA, entitled: "The IEEE 802.11s Extended Service Set Mesh Networking Standard" (6 pages)	☐
	13	"IEEE 802.11g Offers Higher Data Rates and Longer Range" to Jim Zyren et al. by Intersil	☐
	14	"Home Network with Cloud Computing for Home Management", by Katsuya Suzuki and Masahiro Inoue, IEEE 15th International Symposium on Consumer Electronics, 2011, pages 421-425 (5 pages)	☐
	15	Publication by Cisco Systems, Inc. (6/99) entitled: "Internetworking Technologies Overview", Chapter 18: "Multiservice Access Technologies", pages 18-1 to 18-10 (18 pages)	☐
	16	Publication number 1-587005-001-3 by Cisco Systems, Inc. (6/99) entitled: "Internetworking Technologies Handbook", Chapter 19: "Voice / Data Integration Technologies", pages 19-1 to 19-30 (30 pages)	☐
	17	Home Gateway Initiative (HGI) document entitled: "Home Gateway Technical Requirements: Release 1", Version 1.0, 1 July 2006 (112 pages)	☐
	18	Home Gateway Initiative (HGI) document entitled: "HGI guideline Paper - Remote Access", Version 1.01, 18/05/08 (19 pages)	☐

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15782664~~
	Filing Date	~~2015-09-21~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A.KHAN/
	Attorney Docket Number	BINDER ~~151 (2015-07-25)~~ 014-US2

	19	HGI document entitled: "Requirements for an energy efficient home gateway" HGI-RD009-R3, 14/10/2010 (66 pages)	☐
	20	The book entitled: "Practical Design Techniques for Sensor Signal Conditioning", by Analog Devices, Inc., 1999 (ISBN-0-916550-20-6) (366 pages)	☐
	21	"AN39 – Current measurement application handbook", by Zetex Semiconductors PLC 2008, Issue 5, January 2008 (42 pages)	☐
	22	Data-sheet LIS302DL STMicroelectronics, 'MEMS motion sensor 3-axis - ±2g/±8g smart digital output "piccolo" accelerometer', Rev. 4, October 2008 (42 pages)	☐
	23	SignalQuest, Inc., 'DATASHEET SQ-SEN-200 Omnidirectional Tilt and Vibration Sensor', Updated 2009-08-03 (6 pages)	☐
	24	The book entitled: "Sensors and Control Systems in manufacturing", Second Edition 2010, by Sabrie Soloman, The McGraw-Hill Companies, ISBN: 978-0-07-160573-1 (625 pages)	☐
	25	The book entitled: "Fundamentals of Industrial Instrumentation and Process Control", by William C. Dunn, 2005, The McGraw-Hill Companies, ISBN: 0-07-145735-6 (337 pages)	☐
	26	The book entitled: "Sensor technology Handbook", Edited by Jon Wilson, by Newnes-Elsevier 2005, ISBN:0-7506-7729-5 (700 pages)	☐
	27	The book entitled: "Development in Speech Synthesis", by Mark Tatham and Katherine Morton, published 2005 by John Wiley & Sons, Ltd., ISBN: 0-470-85538-X (357 pages)	☐
	28	The book entitled: "Speech Synthesis and Recognition" by John Holmes and Wendy Holmes, 2nd Edition, published 2001 ISBN: 0-7484-0856-8, 2001 (371 pages)	☐
	29	Holtek HT3834 CMOS VLSI Integrated Circuit (IC), '36 Melody Music Generator' available from Holtek Semiconductor Inc., Rev. 1.00, November 2, 2006 (16 pages)	☐

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	[redacted]
	Filing Date	[redacted]
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A KHAN/
	Attorney Docket Number	BINDER[redacted]014-US2

	30	A data sheet PF226-04, EPSON 7910 series 'Multi-Melody IC' available from Seiko-Epson Corporation, 1998 (5 pages)	☐
	31	SAE J1962. Surface Vehicle Standard entitled: "Diagnostic Connector Equivalent to ISO/DIS 15031-3:December 14, 2001", Issued: 1992-06; Revised: 2002-04 (20 pages)	☐
	32	Magnevation SpeakJe, 'Natural Speech & Complex Sound Synthesizer', User's Manual Revision 1.0 July 27, 2004 (17 pages)	☐
	33	Data sheet "NLP-5x Natural Language Processor with Motor, Sensor and Display Control", P/N 80-0317-K, published 2010 by Sensory, Inc. of Santa-Clara, California, U.S.A. (164 pages)	☐
	34	OPTi 82C931, 'Plug and Play Integrated Audio Controller', Data Book 912-3000-035 Revision: 2.1, August 1, 1997 (64 pages)	☐
	35	YMF721 OPL4-ML2 FM + Wavetable Synthesizer LSI, available from Yamaha Corporation described in YMF721 Catalog No. LSI-4MF721A20, July 10, 1997 (41 pages)	☐
	36	White Paper "All You Need To Know About Power over Ethernet (PoE) and the IEEE 802.3af Standard", by PowerDsine Ltd., 06-0002-082 20-May-04 (24 pages)	☐
	37	IEEE Std. 802.3af-2003, "Part 3: Carrier sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications, Amendment: Data Terminal Equipment (DTE) Power via Media Dependent Interface (MDI)", 2003 (133 pages)	☐
	38	IEEE Std. 802.3at-2009, "Part 3: Carrier sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications, Amendment 3: Data Terminal Equipment (DTE) Power via Media Dependent Interface (MDI) Enhancements", 2009 (141 pages)	☐
	39	Ben-Gurion University Publication entitled: "Chapter 9 – Feedforward Control" (pages 221-240) downloaded from http://www.bgu.ac.il/chem_eng/pages/Courses/oren%20courses/Chapter_9.pdf (20 pages)	☐
	40	"PID Control System Analysis, Design, and Technology" by Kiam Heong Ang, Gregory Chong, and Yun Li, published IEEE Transaction on Control System Technology, Vol. 13 No. 4, July 2005 (pp. 559-576) (18 pages)	☐

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~13723634~~
	Filing Date	~~2013-03-01~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	~~BINDER 1 (2-13-US2)~~ /HASSAN A. KHAN/ 014-US2

	41	A data sheet 'True Random Number Generation IC RPG100 / RPG100B' publication number HM-RAE001-0509, by FDK Corporation, last update September 2005 (4 pages)	☐
	42	The Publication entitled: "Introduction to Fuzzy Control" by Marcelo Godoy Simoes (5 pages)	☐
	43	The publication entitled: "Fuzzy Logic in Embedded Microcomputers and Control Systems" by Walter Banks and Gordon Hayward, published by the Byte Craft Limited, October 2002 (75 pages)	☐
	44	SAE J1939-01 Surface Vehicle Standard entitled: "Recommended Practice for Control and Communication Network for On-Highway Equipment", Issued: 2000-09 (7 pages)	☐
	45	SAE J1939 Surface Vehicle Recommended Practice entitled: "Recommended Practice for a Serial Control and Communication Vehicle Network", Issued: 2000-04; Revised: 2005-01 (257 pages)	☐
	46	The book entitled: "The Image Processing Handbook", Sixth Edition, by John C. Russ, from CRC Press ISBN: 978-1-4398-4063-4, 2011 (858 pages)	☐
	47	The book entitled: "Handbook of Image & Video Processing", edited by Al Bovik, by Academic Press ISBN: 0-12-119790-5, 2000 (974 pages)	☐
	48	The Brown University publication CS-99-11 entitled: "A survey of hand Posture and Gesture Recognition Techniques and Technology", by Joseph J. LaViola Jr., June 1999 (80 pages)	☐
	49	Cisco Validated Design document entitled: "Building Automation System over IP (BAS/IP) Design and Implementation Guide" by Cisco Systems and Johnson Controls, 15 August 2008, v8.1 (107 pages)	☐
	50	The article entitled:" Smart Homes for Older People: Positive Aging in a Digital World", by Quynh Lê, Hoang Boi Nguyen and Tony Barnett, published in Future Internet 2012, 4, 607-617; doi:10.3390/fi4020607 (11 pages)	☐
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15703634~~
	Filing Date	~~2018-03-01~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	BINDER ~~YA (2-15-14-2)~~ 014-US2

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Yehuda Binder
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	BI/[illegible] KHAN/

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Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	~~2016-11-27~~ 2017-07-23
Name/Print	Yehuda Binder	Registration Number	73612

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Doc description: Information Disclosure Statement (IDS) Filed

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	15657163
Filing Date	2017-07-23
First Named Inventor	Yehuda Binder
Art Unit	15/657,163 - GAU: 2456
Examiner Name	/HASSAN A KHAN/
Attorney Docket Number	BINDER-014-US3

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	1	20030105389	A1	2003-06-05	Julianne Noonan	
	2	20070283005	A1	2007-12-06	Robert P. Beliles	
	3	20090198380	A1	2009-08-06	Scott Justin-Marl Friedman	
	4	20090224906	A1	2009-09-10	Lennart BALGARD	
	5	20100071053	A1	2010-03-18	Amir Ansari	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	15657163
Filing Date	2017-07-23
First Named Inventor	Yehuda Binder
Art Unit	15/657,163 - GAU: 2456
Examiner Name	/HASSAN A KHAN/
Attorney Docket Number	BINDER-014-US3

	6	20120079149	A1	2012-03-29	David C. Gelvin	
	7	20130091279	A1	2013-04-11	Wassim Haddad	
	8	20130308581	A1	2013-11-21	Ahmadreza (Reza) Rofougaran	
	9	20150046582	A1	2015-02-12	David C. Gelvin	
	10	20160062330	A1	2016-03-03	Yuuichi Abe	
	11	20160344745	A1	2016-11-24	Michael W. Johnson	
	12	20030009271	A1	2003-01-09	Susumu Akiyama	
	13	20060111825	A1	2006-05-25	Minoru Okada	
	14	20070021847	A1	2007-01-25	Akihiko Hyodo	
	15	20070198144	A1	2007-08-23	William Robert Norris	
	16	20080100428	A1	2008-05-01	Sherry D. Price	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	15657163
	Filing Date	2017-07-23
	First Named Inventor	Yehuda Binder
	Art Unit	15/657,163 - GAU: 2456
	Examiner Name	/HASSAN A KHAN/
	Attorney Docket Number	BINDER-014-US3

	17	20090138136	A1	2009-05-28	Akihiro Natsume	
	18	20100030421	A1	2010-02-04	Kentaro YOSHIMURA	
	19	20100211258	A1	2010-08-19	Kohei SAKURAI	
	20	20110153149	A1	2011-06-23	Hong Seok Jeon	
	21	20140215491	A1	2014-07-31	Sateesh K. Addepalli	

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FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
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Examiner Initials*	Cite No	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, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	15657163
	Filing Date	2017-07-23
	First Named Inventor	Yehuda Binder
	Art Unit	15/657,163 - GAU: 2456
	Examiner Name	/HASSAN A KHAN/
	Attorney Docket Number	BINDER-014-US3

EXAMINER SIGNATURE			
Examiner Signature	/HASSAN A KHAN/	Date Considered	09/18/2017

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

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	15657163
Filing Date	2017-07-23
First Named Inventor	Yehuda Binder
Art Unit	15/657,163 - GAU: 2456
Examiner Name	/HASSAN A KHAN/
Attorney Docket Number	BINDER-014-US3

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	2017-08-16
Name/Print	Yehuda Binder	Registration Number	73612

This collection of information is required by 37 CFR 1.97 and 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 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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Doc code :IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (08-08)
Approved for use through 08/31/2006. 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.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	~~13733634~~
Filing Date	~~2013-03-01~~
First Named Inventor	BINDER Yehuda
Art Unit	
Examiner Name	15/657,163 - GAU: 2456
Attorney Docket Number	~~BINDER 001 CONT~~ /HASSAN A KHAN/ 014-US2

U.S.PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	6862353		2005-01-03	Rabenko et al.	
	2	5510765		1996-23-04	Madau; Adrian	
	3	6934426		2005-23-08	Rich et al.	
	4	7843336		2010-30-11	Kucharyson; Richard P.	
	5	8115646		2012-14-02	Tanielian et al.	
	6	6452499		2002-17-09	Runge et al.	
	7	7027418		2006-11-04	Gan et al.	
	8	5274631		1993-28-12	Bhardwaj; Vinod K.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15/657,163~~
	Filing Date	~~2015-03-31~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A.KHAN/
	Attorney Docket Number	BINDER-~~15A (2015-07-23)-0~~014-US2

	9	7010050		2006-07-03	Maryanka; Yair	
	10	6243571		2001-05-06	Bullock et al.	
	11	6069899		2000-30-05	Foley; Peter F.	
	12	5896443		1999-20-04	Dichter; Carl	
	13	3820110		1974-25-06	Henrich et al.	
	14	6473608		2002-29-10	Lehr et al.	

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U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20040151305		2004-05-08	BINDER Yehuda et al.	
	2	20070164865		2007-19-07	Giasson et al.	
	3	20100100327		2010-22-04	Jensen; Thomas P.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15/657,163~~
	Filing Date	~~2017-07-21~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	BINDER ~~YH (2-15-14-15)-6~~ 014-US2

/HASSAN A. KHAN/

	4	20070004449		2007-04-01	Sham; John C.K.		
	5	20050216302		2005-29-09	Raji et al.		
	6	20020166124		2002-07-11	Gurantz et al.		
	7	20020019966		2002-14-02	Yagil et al.		
	8	20030139151		2003-24-07	Lifshitz et al.		
	9	20040032902		2004-19-02	Koifman et al.		

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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15/657,163~~
	Filing Date	~~2017-07-24~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A KHAN/
	Attorney Docket Number	BINDER ~~15/657,163~~ 014-US2

	1		☐

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Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant. /HASSAN A KHAN/ 09/18/2017

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Application Number	
	Filing Date	
	First Named Inventor	Yehuda Binder
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN J KHAN/
	Attorney Docket Number	BINDER-014US2

CERTIFICATION STATEMENT

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☐ See attached certification statement.

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	~~2018-11-27~~ 2017-07-23
Name/Print	Yehuda Binder	Registration Number	73612

This collection of information is required by 37 CFR 1.97 and 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 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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CONFIRMATION NO. 1088

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
15/657,163	07/23/2017 RULE	709	2456	BINDER-014-US3

APPLICANTS

May Patents Ltd., Hod Hasharon, ISRAEL;

INVENTORS

Yehuda BINDER, Ramat Gan, ISRAEL;
Benjamin MAYTAL, Mevasseret Zion, ISRAEL;

**** CONTINUING DATA ***************************

This application is a CON of 13/733,634 01/03/2013
which claims benefit of 61/584,500 01/09/2012
and claims benefit of 61/620,129 04/04/2012
and claims benefit of 61/637,030 04/23/2012
and claims benefit of 61/647,034 05/15/2012

**** FOREIGN APPLICATIONS ***************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
08/03/2017

Foreign Priority claimed	35 USC 119(a-d) conditions met	Verified and Acknowledged	Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
☐ Yes ☑ No	☐ Yes ☑ No	/HASSAN ABDUR-RAHMAN KHAN/ Examiner's Signature	☐ Initials	ISRAEL	60	30	1

ADDRESS

May Patents Ltd. c/o Dorit Shem-Tov
P.O.B 7230
Ramat-Gan, 5217102
ISRAEL

TITLE

SYSTEM AND METHOD FOR SERVER-BASED CONTROL

FILING FEE RECEIVED		
1730	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

BIB (Rev. 05/07).

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	12	(US-20160062330-$ or US-20090198380-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20080307075-$ or US-20090089065-$ or US-20170272316-$).did.	US-PGPUB	OR	ON	2017/09/29 08:34
L2	3	1 and (infrared or infra$1red or gamma or xrays or x$1rays)	US-PGPUB; USPAT	OR	ON	2017/09/29 08:34
L3	0	1 and (actuat$4 with motion)	US-PGPUB; USPAT	OR	ON	2017/09/29 08:40
L4	4	1 and (actuat$4)	US-PGPUB; USPAT	OR	ON	2017/09/29 08:41
L5	2	1 and (actuat$4 with (sound or noise or volume or radio or music))	US-PGPUB; USPAT	OR	ON	2017/09/29 08:49
L6	2	1 and (actuat$4 with (sound or noise or volume or audio or radio or music))	US-PGPUB; USPAT	OR	ON	2017/09/29 08:49
L7	4	1 and (actuat$4 same (sound or noise or volume or audio or radio or music))	US-PGPUB; USPAT	OR	ON	2017/09/29 08:49
L10	0	"15657163"	US-PGPUB; USPAT	OR	ON	2017/09/29 09:02
L11	5777	709/218.ccls.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:03
L12	12682	H04L67/12.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:03
L13	25214	B60K 31/00.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:04
L14	25214	B60K 31/18.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:04
L15	288	B60Y2200/11.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:04
L16	862	B60Y2200/12.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:04
L17	194	B60Y2200/126.cpc.	US-	OR	ON	2017/09/29

			PGPUB; USPAT			09:04
L18	313	B60Y2200/13.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
L19	35	B60Y2200/30.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
L20	110	B60Y2200/40.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
L21	13	B60Y2200/50.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
L22	91	B60Y2200/90.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
L23	36907	G01C 21/00.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
L24	155	G06Q2240/00.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
L25	9132	G07C 5/008.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
L27	15985	G08G 1/00.cpc.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:05
L28	40	(may and patents).as.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:07
L29	42	(may and patents).aanm.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:07
L30	381	(binder and yehuda).in.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:07
L31	39	(maytal and benjamin).in.	US-PGPUB; USPAT	OR	ON	2017/09/29 09:07
S1	1	"13733634"	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:33
S2	7358	(actuator with sensor with network)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:34
S3	161	(actuator with sensor with network with router)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:34
S4	14	(actuator with sensor with network with router with (car or vehicle))	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:34
S5	1020	(actuator with sensor with network with (car or vehicle))	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:37
S6	535	S5 and (router or routing)	US-	ADJ	ON	2016/12/03

			PGPUB; USPAT			01:38
S7	147	S5 and (NAT or DHCP)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:38
S8	54	S5 and (control adj2 logic)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:39
S9	7358	(actuator with sensor with network)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:48
S10	675	S9 and (piezoelectric$6 or (piezo$1electric$6))	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:49
S11	120	S10 and (network with (routing or router))	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:49
S12	58	S11 and (vehicle or car)	US-PGPUB; USPAT	ADJ	ON	2016/12/03 01:49
S13	21	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:08
S14	21	S13 and actuator	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:08
S15	1	S13 and (actuator same router)	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:08
S16	200	(actuator same router same ((vehicle or car or automobile or transport) or (building)))	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:11
S17	119	(actuator same router same ((vehicle or car or automobile or transport) or (building))) same network	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:12
S18	110	(actuator same router same ((vehicle or car or automobile or transport) or (building))) same network same sensor	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:12
S19	76	(actuator same router same ((vehicle or car or automobile or transport) or (building))) same network same (sensor or control) same data	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:12
S20	68	(actuator same router same ((vehicle or car or automobile) or (building))) same network same (sensor or control) same data	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:13
S21	21	(actuator same router same ((vehicle or car or automobile) same (building))) same network same (sensor or control) same	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:15

		data				
S22	21	actuator same router same (vehicle or car or automobile) same building same network same (sensor or control) same data	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:15
S23	47	S20 XOR S22	US-PGPUB; USPAT	ADJ	ON	2017/02/13 22:17
S24	1	(US-8195844-$).did.	USPAT	ADJ	ON	2017/02/13 22:36
S25	1	"20090083589"	USPAT	ADJ	ON	2017/02/13 22:36
S36	1	(US-20130201316-$).did.	US-PGPUB	ADJ	ON	2017/02/14 00:34
S37	520	(home with network) same sensor same gateway same network	US-PGPUB	ADJ	ON	2017/02/14 00:37
S38	222	(home with network) with sensor with gateway	US-PGPUB	ADJ	ON	2017/02/14 00:37
S39	4	(home with network) with sensor with gateway with command	US-PGPUB	ADJ	ON	2017/02/14 00:38
S40	22	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:23
S41	21	S40 and (vehicle or vehical or automobile or car)	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:29
S42	21	S40 and (vehicle or vehical or automobile or car) and actuator	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:29
S43	15	S40 and (vehicle or vehical or automobile or car) and actuator and sensor and network and cellular and wireless	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:30
S44	15	S40 and (coupled)	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:35
S45	1	S40 and (router)	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:36
S46	832	(vehicle or car) with router with (control or server) with network	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:37
S47	11	(vehicle or car) with router with (control or server) with network with actuator	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:37
S48	2	"20090198380"	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:42

S49	1	"20060217840"	US-PGPUB; USPAT	ADJ	ON	2017/02/14 03:42
S50	7	(US-20160062330-$ or US-20090198380-$ or US-20060217840-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$).did.	US-PGPUB	ADJ	ON	2017/02/17 04:34
S51	4	S50 and (actuator with sensor)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:34
S52	4	S50 and (actuator)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:36
S53	3	"13404575"	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:38
S54	2	S50 and (sensor with router)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:39
S55	27	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:39
S56	3	S55 and (sensor with router)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:39
S57	319	(actuator with sensor with router)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:40
S58	178	(actuator NEAR9 sensor NEAr9 router)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:40
S59	125	(actuator with sensor with router with (command or signal or transmi$6 or data))	US-PGPUB; USPAT	ADJ	ON	2017/02/17 04:41
S60	7	(US-20160062330-$ or US-20090198380-$ or US-20060217840-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$).did.	US-PGPUB	ADJ	ON	2017/02/17 21:05
S61	2	S60 and (router with (building or vehicle or car))	US-PGPUB; USPAT	ADJ	ON	2017/02/17 21:06
S62	2	S60 and (router with (building or vehicle or car) with sensor)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 21:06

S63	524	(router with (building or vehicle or car) with sensor)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 21:06
S64	96	(router near9 (building or vehicle or car) near5 sensor)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 21:07
S65	28	(router near9 (building or vehicle or car) near9 sensor near9 network)	US-PGPUB; USPAT	ADJ	ON	2017/02/17 21:07
S66	1	(US-20130201316-$).did.	US-PGPUB	ADJ	ON	2017/02/17 21:11
S67	28	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/02/20 05:11
S68	27	S67 and (control with (actuator or sensor))	US-PGPUB; USPAT	ADJ	ON	2017/02/20 05:11
S69	22	S67 and (control NEAR0 (actuator or sensor))	US-PGPUB; USPAT	ADJ	ON	2017/02/20 05:11
S70	26	S67 and (control NEAR9 (actuator or sensor))	US-PGPUB; USPAT	ADJ	ON	2017/02/20 05:11
S71	9	S67 and (command NEAR9 (actuator or sensor))	US-PGPUB; USPAT	ADJ	ON	2017/02/20 05:15
S72	2	(US-20160062330-$ or US-20070283005-$).did.	US-PGPUB	ADJ	ON	2017/02/20 06:05
S73	1	S72 and ((additional or extra or second or third) with sensor)	US-PGPUB	ADJ	ON	2017/02/20 06:29
S74	28	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/02/20 06:30
S75	12	S74 and ((additional or extra or second or	US-	ADJ	ON	2017/02/20

		third) with sensor)	PGPUB			06:31
S76	2	S72 and ((more) with sensor)	US-PGPUB	ADJ	ON	2017/02/20 06:32
S77	5	S74 and piezoelectric	US-PGPUB	ADJ	ON	2017/02/20 06:43
S78	2	S72 and (IP or address or internet or protocol)	US-PGPUB	ADJ	ON	2017/02/20 06:56
S79	2	S74 and (DHCP and (IPv4 or IPv6))	US-PGPUB	ADJ	ON	2017/02/20 07:02
S80	146	(control$6 with (sensor or actuator) with network) and (DHCP and (IPv4 or IPv6))	US-PGPUB	ADJ	ON	2017/02/20 07:04
S81	69	(control$6 with (sensor or actuator) with network) and (DHCP with (IPv4 or IPv6))	US-PGPUB	ADJ	ON	2017/02/20 07:04
S82	1	(US-20130201316-$).did.	US-PGPUB	ADJ	ON	2017/02/20 07:12
S83	36	S81 and zigbee	US-PGPUB	ADJ	ON	2017/02/20 07:21
S84	9	S81 and zigbee and (temperature with sensor)	US-PGPUB	ADJ	ON	2017/02/20 07:22
S85	36	S81 and zigbee and (sensor)	US-PGPUB	ADJ	ON	2017/02/20 07:22
S86	15	S81 and zigbee and (temperature)	US-PGPUB	ADJ	ON	2017/02/20 07:22
S87	12	S81 and zigbee and (temperature) and (DHCP with assign$6)	US-PGPUB	ADJ	ON	2017/02/20 07:23
S88	3	(US-20120253480-$ or US-20100071053-$ or US-20070283005-$).did.	US-PGPUB	ADJ	ON	2017/02/21 02:26
S89	1	S88 and (IP with assign$6)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:28
S90	3	S88 and (power)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:34
S91	32	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:35
S92	15493	(router with power)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:36
S93	2	S91 and (router with power)	US-PGPUB;	ADJ	ON	2017/02/21 02:36

			USPAT			
S94	1606	(router with power with (case or box or inside or enclosure or casing))	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:36
S95	578	(router NEAR9 power NEAR9 (case or box or inside or enclosure or casing))	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:37
S96	587	(router NEAR9 power NEAR9 (housed or enclos$5 or case or box or inside or enclosure or casing))	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:37
S97	17	(router NEAR9 power NEAR9 (housed or enclos$5 or case or box or inside or enclosure or casing) NEAR9 (AC or DC))	US-PGPUB; USPAT	ADJ	ON	2017/02/21 02:37
S98	17	S91 and (light with sensor)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 03:05
S99	0	S88 and (light with (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:19
S100	5	S91 and (light with (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:19
S101	5	S91 and (light NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:20
S102	128	((actuator with light) NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:22
S103	79	((actuator NEAR5 light) NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:23
S104	6	(sensor with (actuator NEAR5 light) NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:23
S105	1	(sensor with (actuator NEAR2 light) NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:25
S106	21	((actuator NEAR2 light) NEAR9 (invisible or visible or infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))	US-PGPUB	ADJ	ON	2017/02/21 03:25
S107	1	S106 and invisible	US-PGPUB	ADJ	ON	2017/02/21 03:37
S108	1	S106 and (nonvisible or "non-visible" or invisible)	US-PGPUB	ADJ	ON	2017/02/21 03:38
S109	12	S106 and (LED or SSL or (discharge adj2 lamp) or (flourescent adj2 lamp) or PLED or (laser near5 diode))	US-PGPUB	ADJ	ON	2017/02/21 03:50
S110	10	S106 and (diode or SSL or (discharge adj2 lamp) or (flourescent adj2 lamp) or PLED or (laser near5 diode))	US-PGPUB	ADJ	ON	2017/02/21 03:50
S111	10	S106 and (diode or (discharge adj2 lamp) or (flourescent adj2 lamp) or PLED or (laser near5 diode))	US-PGPUB	ADJ	ON	2017/02/21 03:50
S112	4	((actuator NEAR2 light NEAR5 (discharge or emit)) NEAR9 (invisible or visible or	US-PGPUB	ADJ	ON	2017/02/21 05:29

		infrared, ultraviolet, xrays or "x-rays" or (x adj2 rays) or gamma))				
S113	58	(actuator NEAR2 light NEAR5 (discharge or emit))	US-PGPUB	ADJ	ON	2017/02/21 05:30
S114	4	(actuator NEAR2 light NEAR5 (discharge or emit) NEAR9 visible)	US-PGPUB	ADJ	ON	2017/02/21 05:30
S115	5	(actuator NEAR2 light NEAR5 (discharge or emit) with sensor)	US-PGPUB	ADJ	ON	2017/02/21 05:31
S116	1605	((Frequency adj3 Division adj3 Multiplexing) or FDM) with power with (communication or signal or transmission)	US-PGPUB	ADJ	ON	2017/02/21 05:48
S117	1	((Frequency adj3 Division adj3 Multiplexing) or FDM) with power with (communication or signal or transmission) with band with splitter	US-PGPUB	ADJ	ON	2017/02/21 05:48
S118	34	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/02/21 05:54
S119	13	S118 and splitter	US-PGPUB; USPAT	ADJ	ON	2017/02/21 05:54
S120	13	S118 and splitter and frequency	US-PGPUB; USPAT	ADJ	ON	2017/02/21 05:54
S121	1	S118 and (splitter same frequency)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 05:55
S122	234	(power with data with splitter with frequency)	US-PGPUB; USPAT	ADJ	ON	2017/02/21 05:56
S123	1	(US-20130201316-$).did.	US-PGPUB	ADJ	ON	2017/02/21 10:03
S124	462	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access))	US-PGPUB	ADJ	ON	2017/02/21 10:07
S125	261	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency))	US-PGPUB	ADJ	ON	2017/02/21 10:08

S126	302	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel))	US-PGPUB	ADJ	ON	2017/02/21 10:08
S127	273	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency))	US-PGPUB	ADJ	ON	2017/02/21 10:09
S128	112	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency)) and transformer and capacitor	US-PGPUB	ADJ	ON	2017/02/21 10:10
S129	88	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency)) and transformer and capacitor and sensor	US-PGPUB	ADJ	ON	2017/02/21 10:10
S130	41	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency)) and transformer and capacitor and sensor and (split or splits or splitter)	US-PGPUB	ADJ	ON	2017/02/21 10:13
S131	31	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency)) and (transformer with capacitor with (windings or wirings or coils))	US-PGPUB	ADJ	ON	2017/02/21 10:15
S132	3	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency)) and (transformer with capacitor with (windings or wirings or coils)) and sensor and (split or splits or splitter)	US-PGPUB	ADJ	ON	2017/02/21 10:19
S133	239	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near3 (band or frequency or channel)) and ((data or communication) near5 (channel or band	US-PGPUB	ADJ	ON	2017/02/21 10:34

		or frequency))				
S134	262	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (modula$4 near5 band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency))	US-PGPUB	ADJ	ON	2017/02/21 10:35
S135	45	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 modula$4 near5 (band or frequency or channel)) and ((data or communication) near5 (channel or band or frequency))	US-PGPUB	ADJ	ON	2017/02/21 10:35
S136	1	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 modula$4 near5 (band or frequenc$4 or channel) near5 (different or distinct or seperate or unique or other or another)) and ((data or communication) near5 (channel or band or frequency))	US-PGPUB	ADJ	ON	2017/02/21 10:51
S137	57	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequenc$4 or channel) near5 (different or distinct or seperate)) and ((data or communication) near5 (channel or band or frequency))	US-PGPUB	ADJ	ON	2017/02/21 11:00
S138	0	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequenc$4 or channel) near5 (different or distinct or seperate)) and ((data or communication) near5 (channel or band or frequency)) and (split or splitter or divide) and (transformer with capacitor with (windings or coils))	US-PGPUB	ADJ	ON	2017/02/21 11:01
S139	17	(high adj2 pass adj2 filter) and (low adj2 pass adj2 filter) and (FDMA or (frequency near5 division near5 multiple near5 access)) and (power near5 (band or frequenc$4 or channel) near5 (different or distinct or seperate)) and ((data or communication) near5 (channel or band or frequency)) and (split or splitter or divide) and (transformer with capacitor)	US-PGPUB	ADJ	ON	2017/02/21 11:01
S140	1	(US-20130308581-$).did.	US-PGPUB	ADJ	ON	2017/02/21 11:09
S141	1	(US-20110118888-$).did.	US-PGPUB	ADJ	ON	2017/02/21 11:28
S142	2	(US-20160062330-$ or US-20070283005-$).did.	US-PGPUB	ADJ	ON	2017/02/21 11:49
S143	0	S142 and appliance	US-PGPUB; USPAT	ADJ	ON	2017/02/21 11:49

S144	1	(US-20130201316-$).did.	US-PGPUB	ADJ	ON	2017/02/21 12:06
S145	205	(yehuda and binder).in.	US-PGPUB	ADJ	ON	2017/02/21 12:24
S146	26	(benjamin and maytal).in.	US-PGPUB	ADJ	ON	2017/02/21 12:25
S147	26	(may and patents).as.	US-PGPUB	ADJ	ON	2017/02/21 12:25
S148	25	(may and patents).aanm.	US-PGPUB	ADJ	ON	2017/02/21 12:25
S149	8	S147 and S148	US-PGPUB	ADJ	ON	2017/02/21 12:25
S150	1	S145 and S146	US-PGPUB	ADJ	ON	2017/02/21 12:25
S151	43	S147 or S148	US-PGPUB	ADJ	ON	2017/02/21 12:26
S152	230	S145 or S146	US-PGPUB	ADJ	ON	2017/02/21 12:26
S153	230	S151 or S152	US-PGPUB	ADJ	ON	2017/02/21 12:26
S154	17	S153 and piezoelectric.clm.	US-PGPUB	ADJ	ON	2017/02/21 12:26
S155	1	S153 and (vehicle and router and actuator).clm.	US-PGPUB	ADJ	ON	2017/02/21 12:27
S156	7130	H04L67/12.cpc.	US-PGPUB	ADJ	ON	2017/02/21 12:27
S157	993	348/77.ccls.	US-PGPUB	ADJ	ON	2017/02/21 12:27
S158	374	700/28.ccls.	US-PGPUB	ADJ	ON	2017/02/21 12:27
S159	148	700/22.ccls.	US-PGPUB	ADJ	ON	2017/02/21 12:28
S160	1455	709/218.ccls.	US-PGPUB	ADJ	ON	2017/02/21 12:28
S161	2	"20130080642"	US-PGPUB; USPAT	ADJ	ON	2017/06/30 12:25
S162	1	"14499166"	US-PGPUB; USPAT	ADJ	ON	2017/06/30 12:27
S163	13	(US-20160062330-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$ or US-20070283005-$ or US-20130308581-$ or US-20110118888-$ or US-20130139440-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$).did.	US-PGPUB	ADJ	ON	2017/07/05 10:43
S164	2	S163 and (sensor and actuator and router)	US-PGPUB; USPAT	ADJ	ON	2017/07/05 10:43
S165	36	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-	US-PGPUB; USPAT	ADJ	ON	2017/07/05 10:44

		20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-20130308581-$ or US-20110118888-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.				
S166	3	S165 and (sensor and actuator and router)	US-PGPUB; USPAT	ADJ	ON	2017/07/05 10:44
S168	7	S165 and (sensor same network same router)	US-PGPUB; USPAT	ADJ	ON	2017/07/05 10:45
S169	36	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-20130308581-$ or US-20110118888-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/07/05 11:20
S170	7	S169 and (sensor same network same router)	US-PGPUB; USPAT	ADJ	ON	2017/07/05 11:20
S171	3	S170 and actuator	US-PGPUB; USPAT	ADJ	ON	2017/07/05 11:20
S172	24	S169 and actuator	US-PGPUB; USPAT	ADJ	ON	2017/07/05 11:21
S173	2	(US-20160062330-$ or US-20070283005-$).did.	US-PGPUB	OR	OFF	2017/07/19 19:14
S174	1	(US-20130201316-$).did.	US-PGPUB	OR	OFF	2017/07/20 00:24
S175	1	"20120079149"	US-PGPUB	OR	OFF	2017/07/20 00:29
S176	1	"20120079149"	US-PGPUB	OR	OFF	2017/07/20 06:37

S177	1	S176 and ((sensor or actuator) with router)	US-PGPUB	OR	OFF	2017/07/20 06:37
S178	1	S176 and (router)	US-PGPUB	OR	OFF	2017/07/20 06:37
S179	0	S176 and (commands with router)	US-PGPUB	OR	OFF	2017/07/20 06:41
S180	37	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-20130308581-$ or US-20110118888-$ or US-20120079149-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	OR	OFF	2017/07/20 06:41
S181	1	S180 and (commands with router)	US-PGPUB	OR	OFF	2017/07/20 06:41
S182	2	(actuator with commands with router)	US-PGPUB	OR	OFF	2017/07/20 06:42
S183	25	(sensor with commands with router)	US-PGPUB	OR	OFF	2017/07/20 06:42
S184	9	(sensor NEAR9 commands NEAR9 router)	US-PGPUB	OR	OFF	2017/07/20 06:42
S185	3	S184 and actuator	US-PGPUB	OR	OFF	2017/07/20 06:54
S186	3	(US-20160062330-$ or US-20100071053-$ or US-20070283005-$).did.	US-PGPUB	OR	OFF	2017/07/20 09:43
S192	3	(US-20160062330-$ or US-20100071053-$ or US-20070283005-$).did.	US-PGPUB	OR	OFF	2017/07/20 09:45
S193	3	S192 and address	US-PGPUB	OR	OFF	2017/07/20 09:45
S194	0	S192 and ((unique or individual or distinct or separate) with address)	US-PGPUB	OR	OFF	2017/07/20 09:46
S195	14	(US-20160062330-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$ or US-20070283005-$ or US-20130308581-$ or US-20110118888-$ or US-20130139440-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20120079149-$).did.	US-PGPUB	OR	OFF	2017/07/20 12:16
S200	14	(US-20160062330-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$ or US-20070283005-$	US-PGPUB	OR	OFF	2017/07/20 12:17

		or US-20130308581-$ or US-20110118888-$ or US-20130139440-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20120079149-$).did.				
S201	12	S200 and power	US-PGPUB	OR	OFF	2017/07/20 12:17
S202	2	S200 and (power with (socket or port or connector))	US-PGPUB	OR	OFF	2017/07/20 12:17
S203	3	S200 and (power with (AC or DC))	US-PGPUB	OR	OFF	2017/07/20 12:18
S204	1	(US-20130201316-$).did.	US-PGPUB	OR	OFF	2017/07/20 12:23
S205	0	S204 and medical	USPAT	OR	OFF	2017/07/20 12:23
S206	0	S204 and medicine	USPAT	OR	OFF	2017/07/20 12:23
S207	0	S204 and power	USPAT	OR	OFF	2017/07/20 12:23
S208	0	S204 and actuator	USPAT	OR	OFF	2017/07/20 12:23
S209	14	S200 and sensor	US-PGPUB	OR	OFF	2017/07/20 12:23
S210	12	S200 and power	US-PGPUB	OR	OFF	2017/07/20 12:23
S212	1	S204 and medical	US-PGPUB	OR	OFF	2017/07/20 12:23
S213	5	S201 and (AC or DC)	US-PGPUB	OR	OFF	2017/07/20 12:27
S214	1	(US-20130201316-$).did.	US-PGPUB	OR	OFF	2017/07/20 14:03
S215	14	(US-20160062330-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$ or US-20070283005-$ or US-20130308581-$ or US-20110118888-$ or US-20130139440-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20120079149-$).did.	US-PGPUB	OR	OFF	2017/07/20 15:03
S220	14	(US-20160062330-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$ or US-20070283005-$ or US-20130308581-$ or US-20110118888-$ or US-20130139440-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20120079149-$).did.	US-PGPUB	OR	OFF	2017/07/20 15:05
S225	5	S220 and battery	US-PGPUB	OR	OFF	2017/07/20 15:06
S226	12	S220 and network	US-PGPUB	OR	OFF	2017/07/20 15:06
S227	3	S220 and (data with paths)	US-PGPUB	OR	OFF	2017/07/20 15:06
S228	2	S220 and (router with port)	US-PGPUB	OR	OFF	2017/07/20 15:16

S229	8	S220 and (embed or embedded or inside)	US-PGPUB	OR	OFF	2017/07/20 15:40
S230	2	S220 and ((embed or embedded or inside) with router)	US-PGPUB	OR	OFF	2017/07/20 15:49
S231	5	S220 and ((embed or embedded or inside) with sensor)	US-PGPUB	OR	OFF	2017/07/20 15:50
S232	5	S220 and ((embed or embedded or inside or contained) with sensor)	US-PGPUB	OR	OFF	2017/07/20 15:51
S233	2	S220 and ((embed or embedded or inside or contained) with router)	US-PGPUB	OR	OFF	2017/07/20 15:51
S234	5	S220 and ((router or sensor) with integrat$4)	US-PGPUB	OR	OFF	2017/07/20 15:51
S235	12	S220 and (embedded or embed or integrat$4)	US-PGPUB	OR	OFF	2017/07/20 15:56
S236	13	(US-20160062330-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20150046582-$ or US-20100030421-$ or US-20070283005-$ or US-20130308581-$ or US-20110118888-$ or US-20130139440-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$).did.	US-PGPUB	OR	OFF	2017/07/20 19:05
S242	13	S236 and device	US-PGPUB	OR	OFF	2017/07/20 19:06
S243	0	S236 and (routing with phone)	US-PGPUB	OR	OFF	2017/07/20 19:08
S244	2	S236 and (router with phone)	US-PGPUB	OR	OFF	2017/07/20 19:08
S245	1	(US-20130201316-$).did.	US-PGPUB	OR	OFF	2017/07/20 19:22
S246	1	S245 and actuator	US-PGPUB	OR	OFF	2017/07/20 19:22
S247	1063	ISM near2 radio near2 band	US-PGPUB	OR	OFF	2017/07/20 19:44
S248	496	industrial near3 scientific near3 radio near3 band	US-PGPUB	OR	OFF	2017/07/20 19:44
S249	1	(industrial near3 scientific near3 radio near3 band) near5 WAN	US-PGPUB	OR	OFF	2017/07/20 19:45
S250	3	(industrial near3 scientific near3 radio near3 band) with WAN	US-PGPUB	OR	OFF	2017/07/20 19:46
S251	0	(industrial near3 scientific near3 radio near3 band) near5 internet	US-PGPUB	OR	OFF	2017/07/20 19:46
S252	14	(industrial near3 scientific near3 radio near3 band) near5 network	US-PGPUB	OR	OFF	2017/07/20 19:46
S253	1	S236 and (WAN with antenna)	US-PGPUB	OR	OFF	2017/07/20 19:56
S254	1	S236 and (WAN with modem)	US-PGPUB	OR	OFF	2017/07/20 19:59
S255	1	(US-20130201316-$).did.	US-PGPUB	OR	OFF	2017/07/20 20:19
S256	157	(BINDER and Yehuda).in.	USPAT	OR	OFF	2017/07/20 20:26
S257	10	(MAYTAL and Benjamin).in.	USPAT	OR	OFF	2017/07/20 20:26
S258	4181	H04L67/12.cpc.	USPAT	OR	OFF	2017/07/20

						20:27
S259	41	(B60Y2200/30 G06Q2240/00).cpc.	USPAT	OR	OFF	2017/07/20 20:29
S260	41	(B60Y2200/30 or G06Q2240/00).cpc.	USPAT	OR	OFF	2017/07/20 20:29
S261	15	(B60Y2200/30).cpc.	USPAT	OR	OFF	2017/07/20 20:29
S262	26	(G06Q2240/00).cpc.	USPAT	OR	OFF	2017/07/20 20:29
S263	5119	(G01C21/00 or B60Y2200/90 or B60Y2200/50 or B60Y2200/40 or G08G1/00 or B60Y2200/13 or B60Y2200/126 or B60Y2200/12 or B60Y2200/11 or B60K31/18 or B60K31/00 or G07C5/008).cpc.	USPAT	OR	OFF	2017/07/20 20:31
S264	10730	(348/77 or 348/143 or 370/276 or 700/22 or 700/28 or 701/2 or 701/31.4 or 709/218).ccls.	USPAT	OR	OFF	2017/07/20 20:33
S265	11	(may and patents).as.	USPAT	OR	OFF	2017/07/20 20:33
S266	6	(may and patents).aanm.	USPAT	OR	OFF	2017/07/20 20:34
S267	0	"15657163"	US-PGPUB; USPAT	ADJ	ON	2017/09/18 11:52
S268	11	(US-20160062330-$ or US-20090198380-$ or US-20160344745-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20120079149-$).did.	US-PGPUB	OR	ON	2017/09/18 12:22
S269	7	S268 and voice	US-PGPUB; USPAT	OR	ON	2017/09/18 12:22
S270	8	S268 and (audio or human)	US-PGPUB; USPAT	OR	ON	2017/09/18 12:23
S271	42	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-20130308581-$ or US-20110118888-$ or US-20120079149-$ or US-20080031139-$ or US-20080068156-$ or US-20080307075-$ or US-20170111158-$ or US-20090224906-$).did. or (US-8140658-	US-PGPUB; USPAT	OR	ON	2017/09/18 12:24

		$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.				
S272	25	S271 and voice	US-PGPUB; USPAT	OR	ON	2017/09/18 12:25
S273	2	S271 and ((mic or microphone) with voice)	US-PGPUB; USPAT	OR	ON	2017/09/18 12:27
S274	31	S271 and (person or human)	US-PGPUB; USPAT	OR	ON	2017/09/18 12:38
S275	17	(control$4 or operat$4) with (actuator with (human) with voice)	US-PGPUB; USPAT	OR	ON	2017/09/18 12:43
S276	7612	(control$4 or operat$4) with (actuator with voice)	US-PGPUB; USPAT	OR	ON	2017/09/18 12:55
S277	5	(control$4 or operat$4) NEAR9 (actuator with voice) NEAR9 network	US-PGPUB; USPAT	OR	ON	2017/09/18 12:55
S278	10	2009/0089065	US-PGPUB; USPAT	OR	ON	2017/09/19 13:03
S279	2	"20090089065"	US-PGPUB; USPAT	OR	ON	2017/09/19 13:03
S280	13	(US-20160062330-$ or US-20090198380-$ or US-20160344745-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20120079149-$ or US-20080307075-$ or US-20090089065-$).did.	US-PGPUB	OR	ON	2017/09/19 13:12
S281	6	S280 and building	US-PGPUB; USPAT	OR	ON	2017/09/19 13:12
S282	0	"15657163"	US-PGPUB; USPAT	OR	ON	2017/09/19 13:13
S286	2	"13733634"	US-PGPUB; USPAT	ADJ	ON	2017/09/19 13:13
S287	0	S286 and (client adj2 device)	US-PGPUB; USPAT	ADJ	ON	2017/09/19 13:13
S288	5	S280 and ((speech or voice) with (command$4 or control$4))	US-PGPUB; USPAT	OR	ON	2017/09/19 13:17
S289	13	(US-20160062330-$ or US-20090198380-$ or US-20160344745-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20120079149-$ or US-20080307075-$	US-PGPUB	OR	ON	2017/09/27 04:43

		or US-20090089065-$).did.				
S290	7	S289 and (mic or microphone)	US-PGPUB; USPAT	OR	ON	2017/09/27 04:43
S291	13	(US-20160062330-$ or US-20090198380-$ or US-20160344745-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20120079149-$ or US-20080307075-$ or US-20090089065-$).did.	US-PGPUB	OR	ON	2017/09/28 01:25
S292	7	S291 and (mic or microphone or micro$1phone)	US-PGPUB; USPAT	OR	ON	2017/09/28 01:25
S293	43	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-20130308581-$ or US-20110118888-$ or US-20120079149-$ or US-20080031139-$ or US-20080068156-$ or US-20080307075-$ or US-20170111158-$ or US-20090224906-$ or US-20090089065-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.	US-PGPUB; USPAT	OR	ON	2017/09/28 08:46
S294	3281126	S293 and ("same" NEAR4 device) or inside	US-PGPUB; USPAT	OR	ON	2017/09/28 08:46
S295	3281126	S293 and ("same" NEAR4 device) or inside	US-PGPUB; USPAT	OR	ON	2017/09/28 08:46
S296	28	S293 and (("same" NEAR4 device) or inside)	US-PGPUB; USPAT	OR	ON	2017/09/28 08:47
S297	13	(US-20160062330-$ or US-20090198380-$ or US-20160344745-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20120079149-$ or US-20080307075-$ or US-20090089065-$).did.	US-PGPUB	OR	ON	2017/09/28 08:51
S298	5	S297 and actuator	US-PGPUB; USPAT	OR	ON	2017/09/28 08:51

S299	7	S297 and algorithm	US-PGPUB; USPAT	OR	ON	2017/09/28 09:06
S300	13	S297 and sensor	US-PGPUB; USPAT	OR	ON	2017/09/28 09:28
S301	3	S297 and (sensor with light)	US-PGPUB; USPAT	OR	ON	2017/09/28 09:39
S302	3	(US-20070283005-$ or US-20090089065-$ or US-20150046582-$).did.	US-PGPUB	OR	ON	2017/09/29 04:46
S303	1	S302 and (actuator with physical)	US-PGPUB; USPAT	OR	ON	2017/09/29 04:47
S304	2	S302 and (actuator)	US-PGPUB; USPAT	OR	ON	2017/09/29 04:47
S305	13	(US-20160062330-$ or US-20090198380-$ or US-20160344745-$ or US-20150046582-$ or US-20070283005-$ or US-20130308581-$ or US-20100071053-$ or US-20030105389-$ or US-20130091279-$ or US-20090224906-$ or US-20120079149-$ or US-20080307075-$ or US-20090089065-$).did.	US-PGPUB	OR	ON	2017/09/29 04:53
S306	7	S305 and (mic or microphones)	US-PGPUB; USPAT	OR	ON	2017/09/29 04:53
S307	10	S305 and (address)	US-PGPUB; USPAT	OR	ON	2017/09/29 05:22
S308	6	S305 and (zigbee)	US-PGPUB; USPAT	OR	ON	2017/09/29 05:30
S309	5	S305 and ("802.11")	US-PGPUB; USPAT	OR	ON	2017/09/29 05:33
S310	4	S305 and (ISM)	US-PGPUB; USPAT	OR	ON	2017/09/29 05:45
S311	2	S305 and (CDMA)	US-PGPUB; USPAT	OR	ON	2017/09/29 05:48
S312	3	S305 and (UMTS or GSM)	US-PGPUB; USPAT	OR	ON	2017/09/29 05:49
S313	8	S305 and cellular	US-PGPUB; USPAT	OR	ON	2017/09/29 05:49
S314	6	S305 and (HSPA or LTE or MBWA or "802.2" or GSM or WiMax)	US-PGPUB; USPAT	OR	ON	2017/09/29 05:54
S315	1	S305 and (applicance or freezer or refrigerator or food or beverage or coffee or tea or cooker or oven)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:23
S316	43	(US-20130201316-$ or US-20100030421-$ or US-20120303216-$ or US-20140188343-$ or US-20140236384-$ or	US-PGPUB; USPAT	OR	ON	2017/09/29 06:26

		US-20070076593-$ or US-20100211258-$ or US-20080100428-$ or US-20060111825-$ or US-20100148940-$ or US-20100201516-$ or US-20110035491-$ or US-20150046582-$ or US-20160062330-$ or US-20060217840-$ or US-20090198380-$ or US-20150295788-$ or US-20160344745-$ or US-20120253480-$ or US-20070283005-$ or US-20100071053-$ or US-20130091254-$ or US-20140286348-$ or US-20130091279-$ or US-20030105389-$ or US-20130139440-$).did. or (US-20130308581-$ or US-20110118888-$ or US-20120079149-$ or US-20080031139-$ or US-20080068156-$ or US-20080307075-$ or US-20170111158-$ or US-20090224906-$ or US-20090089065-$).did. or (US-8140658-$ or US-7844687-$ or US-7797367-$ or US-7020701-$ or US-6859831-$ or US-6832251-$ or US-6826607-$ or US-6735630-$).did.				
S317	14	S316 and (applicance or freezer or refrigerator or food or beverage or coffee or tea or cooker or oven)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:26
S318	1015	network with sensor with (applicance or freezer or refrigerator or food or beverage or coffee or tea or cooker or oven)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:28
S319	22	S316 and (appliance or freezer or refrigerator or food or beverage or coffee or tea or cooker or oven)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:28
S320	21	S316 and (appliance or kitchen)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:29
S321	3	S316 and (kitchen)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:29
S322	12	(control$4) with network with kitchen with appliance with (speech or voice)	US-PGPUB; USPAT	OR	ON	2017/09/29 06:33
S323	1	(US-20170272316-$).did.	US-PGPUB	OR	ON	2017/09/29 06:36

EAST Search History (Interference)

< This search history is empty>

9/29/2017 9:07:52 AM
C:\Users\hkhan2\Documents\EAST\Workspaces\15657163.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15657163	BINDER ET AL.
	Examiner	Art Unit
	HASSAN KHAN	2456

CPC- SEARCHED		
Symbol	Date	Examiner
H04L67/12, B60K 31/00, B60K 31/18, B60Y2200/11, B60Y2200/12, B60Y2200/126, B60Y2200/13, B60Y2200/30, B60Y2200/40, B60Y2200/50, B60Y2200/90, G01C 21/00, G06Q2240/00, G07C 5/008, G08G 1/00 (combined wit	9/29/2017	H.K.

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	218 (combined with text search)	9/29/2017	H.K.

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

SEARCH NOTES		
Search Notes	Date	Examiner
Assignee search conducted (see EAST search history)	9/29/2017	H.K.
Google Patents search conducted	9/29/2017	H.K.
Inventor search conducted (see EAST search history)	9/29/2017	H.K.
EAST Search History (see attached)	9/29/2017	H.K.

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/HASSAN KHAN/ Examiner.Art Unit 2456	

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15657163	BINDER ET AL.
	Examiner	**Art Unit**
	HASSAN KHAN	2456

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

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

CLAIM		DATE								
Final	Original	09/29/2017								
	1	✓								
	2	✓								
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	28	✓								
	29	✓								
	30	✓								

Doc code :IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (08-08)
Approved for use through 08/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	~~13793634~~
Filing Date	~~2013-03-01~~
First Named Inventor	BINDER Yehuda
Art Unit	
Examiner Name	15/657,163 - GAU: 2456
Attorney Docket Number	BI~~NDER 001 CIP/US~~ 014-US2

U.S.PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	7499239		2009-03-03	Chang; Michael	
	2	6285761		2001-04-09	Patel et al.	
	3	7512645		2009-31-03	Pitz et al.	
	4	7124157		2006-17-10	Ikake; Katsunori	
	5	4905176		1990-27-02	Schulz; Raymond A.	
	6	4853884		1989-01-08	Brown et al.	
	7	7145933		2006-05-12	Szajnowski; Wieslaw Jerzy	
	8	8214070		2012-03-07	Grossmann et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15726664~~
	Filing Date	~~2013-03-01~~
	First Named Inventor	BINDER Yehuda
	Art Unit	~~15/657,163 - GAU: 2456~~
	Examiner Name	~~/HASSAN A.KHAN/~~
	Attorney Docket Number	BINDER ~~131 (2013-07-25)~~ 014-US2

	9	8180492		2012-15-05	Steinberg; John Douglas	
	10	6535243		2003-18-03	Tullis; Barclay J.	
	11	6552743		2003-22-04	Rissman; Paul	
	12	6788332		2004-07-09	Cook; Charles I.	
	13	5666159		1997-09-09	Parulski et al.	
	14	7327385		2008-05-02	Yamaguchi; Hirohisa	
	15	5402170		1995-28-03	Parulski et al.	
	16	7432952		2008-07-10	Fukuoka; Hiroki	
	17	5138459		1992-11-08	Roberts et al.	
	18	5870138		1999-09-02	Smith et al.,	
	19	7317815		2008-08-01	Steinberg et al.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~13763634~~
	Filing Date	~~2013-02-01~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	BINDER ~~YEH (2.45-04-25)~~ 014-US2

/HASSAN A.KHAN/

	20	5987154		1999-16-11	Gibbon et al.	
	21	6128397		2000-03-10	Baluja et al.	
	22	6188777		2001-13-02	Darrell et al.	
	23	6282317		2001-28-08	Luo et al.	
	24	6301370		2001-09-10	Steffens et al.	
	25	6332033		2001-18-12	Qian; Richard	
	26	6404900		2002-11-06	Qian et al.	
	27	6407777		2002-18-06	DeLuca; Michael Joseph	
	28	7508961		2009-24-03	Chen et al.	
	29	7315630		2008-01-01	Steinberg et al.	
	30	7110575		2006-19-09	Chen et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.A.K/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15703634~~
	Filing Date	~~2010-03-01~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A KHAN/
	Attorney Docket Number	BINDER~~-001 (0-0-0-0-0)~~-014-US2

	31	6526161		2003-25-02	Yan; Yong	
	32	6516154		2003-04-02	Parulski et al.	
	33	6504942		2003-07-01	Hong et al.	
	34	6501857		2002-31-12	Gotsman et al.	
	35	6473199		2002-29-10	Gilman et al.	
	36	6940545		2005-06-09	Ray et al.	
	37	RE33682		1991-03-09	Hiramatsu; Tatsuo	
	38	RE31370		1983-06-09	Mashimo , et al.	
	39	4047187		1977-06-09	Mashimo , et al.	
	40	4317991		1982-02-03	Stauffer; Norman L.	
	41	4367027		1983-04-01	Stauffer; Norman L.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15/657,163~~
	Filing Date	~~2017-07-~~01
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A.KHAN/
	Attorney Docket Number	BINDER-~~15/657,163~~-014-US2

	42	4638364		1987-20-01	Hiramatsu; Tatsuo	
	43	5291234		1994-01-03	Shindo , et al.	
	44	5386103		1995-31-01	DeBan , et al.	
	45	5488429		1996-30-01	Kojima , et al.	
	46	5638136		1997-10-06	Kojima , et al.	
	47	5642431		1997-24-06	Poggio , et al.	
	48	5710833		1998-20-01	Moghaddam , et al.	

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U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20050044119		2005-24-02	Langin-Hooper et al.	
	2	20080263117		2008-23-10	Rose et al.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15/657,163~~
	Filing Date	~~2015-03-~~01
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A KHAN/
	Attorney Docket Number	BINDER-~~15A (2015-07-23)~~-014-US2

FOREIGN PATENT DOCUMENTS								
Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

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NON-PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No	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, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	ITU-T G.9960 entitled: "Unified high-speed wireline-based home networking transceivers – System architecture and physical layer specification", 12/2011 (160 pages)	☐
	2	ITU-T G.989.1 entitled: "Phoneline networking transceivers – Foundation", 02/2001 (19 pages)	☐
	3	RFC 5389 entitled: "Session Traversal Utilities for NAT (STUN)", October 2008 51 pages)	☐
	4	RFC 4098 entitled: "Terminology for Benchmarking BGP Device Convergence in the Control Plane", June 2005 (37 pages)	☐
	5	RFC 3550 entitled: "RTP: A Transport Protocol for Real-Time Applications", July 2003 (89 pages)	☐
	6	RFC 3315 entitled: "Dynamic Host Configuration Protocol for IPv6 (DHCPv6)", July 2003 (102 pages)	☐
	7	RFC 3261 entitled: "SIP: Session Initiation Protocol", June 2002 (269 pages)	☐

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15736654~~
	Filing Date	~~2015-03-~~01
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	BINDER ~~/H.A.KHAN/~~ 014-US2

	8	RFC 2460 entitled: "Internet Protocol, Version 6 (IPv6) Specification", December 1998 (40 pages)	☐
	9	RFC 2131 entitled: "Dynamic Host Configuration Protocol", March 1997 (46 pages)	☐
	10	RFC 1349 entitled: "Type of Service in the Internet Protocol Suite", July 1992 (29 pages)	☐
	11	RFC 1034 entitled: "DOMAIN NAMES - CONCEPTS AND FACILITIES", November 1987 (56 pages)	☐
	12	RFC 1035 entitled: "DOMAIN NAMES - IMPLEMENTATION AND SPECIFICATION", November 1987 (56 pages)	☐
	13	RFC 791 entitled: "Internet Protocol", September 1981 (52 pages)	☐
	14	ECMA-352 entitled: "Near Field Communication -- Interface and Protocol -2 (NFCIP-2)", by ECMA International, 2nd Edition/June 2010 (12 pages)	☐
	15	ECMA-340 entitled: "Near Field Communication -- Interface and Protocol (NFCIP-1)", by ECMA International, 2nd Edition/December 2004 (65 pages)	☐
	16	IEEE Std 802.15.4™-2011, "IEEE Standard for Local and metropolitan area networks - Part 15.4: Low-Rate Wireless Personal Area Networks (LR-WPANs)", Approved 16 June 2011 (334 pages)	☐
	17	IEEE Std 802.15.3c™-2009, "IEEE Standard for Information technology - Part 15.3: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for High Rate Wireless Personal Area Networks (WPANs)", Published by IEEE on 12 October 2009 (203 pages)	☐
	18	"Universal Serial Bus 3.0 Specification", Revision 1.0, June 6, 2011, downloaded from www.usb.org (531 pages)	☐

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	~~15/657,163~~
	Filing Date	~~2017-07-21~~
	First Named Inventor	BINDER Yehuda
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456 /HASSAN A KHAN/
	Attorney Docket Number	BINDER ~~15A (2015-07-23)~~ 014-US2

	19	"RocketIO™ Transceiver User Guide", UG024 (v3.0), February 22, 2007 (156 pages).	☐
	20	SUCKOW E.H., "Basics of High-Performance SerDes Design: Part I", Fairchild Semiconductor International, downloaded 10/2011 (8 pages).	☐
	21	"Hard-Disk Basics" compiled from PCGUIDE.COM by Mehedi Hasan, February 12, 2005 (738 pages)	☐

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EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant. /HASSAN A KHAN/ 09/18/2017

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Yehuda Binder
	Art Unit	
	Examiner Name	15/657,163 - GAU: 2456
	Attorney Docket Number	B/HUSSAIN&2 KHAN/

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	~~2016-11-27~~ 2017-07-23
Name/Print	Yehuda Binder	Registration Number	73612

This collection of information is required by 37 CFR 1.97 and 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 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	15657163
Filing Date	2017-07-23
First Named Inventor	Yehuda Binder
Art Unit	
Examiner Name	
Attorney Docket Number	BINDER-014-US3

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	1	20030105389	A1	2003-06-05	Julianne Noonan	
	2	20070283005	A1	2007-12-06	Robert P. Beliles	
	3	20090198380	A1	2009-08-06	Scott Justin-Marl Friedman	
	4	20090224906	A1	2009-09-10	Lennart BALGARD	
	5	20100071053	A1	2010-03-18	Amir Ansari	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	15657163
	Filing Date	2017-07-23
	First Named Inventor	Yehuda Binder
	Art Unit	
	Examiner Name	
	Attorney Docket Number	BINDER-014-US3

	6	20120079149	A1	2012-03-29	David C. Gelvin	
	7	20130091279	A1	2013-04-11	Wassim Haddad	
	8	20130308581	A1	2013-11-21	Ahmadreza (Reza) Rofougaran	
	9	20150046582	A1	2015-02-12	David C. Gelvin	
	10	20160062330	A1	2016-03-03	Yuuichi Abe	
	11	20160344745	A1	2016-11-24	Michael W. Johnson	
	12	20030009271	A1	2003-01-09	Susumu Akiyama	
	13	20060111825	A1	2006-05-25	Minoru Okada	
	14	20070021847	A1	2007-01-25	Akihiko Hyodo	
	15	20070198144	A1	2007-08-23	William Robert Norris	
	16	20080100428	A1	2008-05-01	Sherry D. Price	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	15657163
	Filing Date	2017-07-23
	First Named Inventor	Yehuda Binder
	Art Unit	
	Examiner Name	
	Attorney Docket Number	BINDER-014-US3

	17	20090138136	A1	2009-05-28	Akihiro Natsume	
	18	20100030421	A1	2010-02-04	Kentaro YOSHIMURA	
	19	20100211258	A1	2010-08-19	Kohei SAKURAI	
	20	20110153149	A1	2011-06-23	Hong Seok Jeon	
	21	20140215491	A1	2014-07-31	Sateesh K. Addepalli	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	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, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1		

If you wish to add additional non-patent literature document citation information please click the Add button Add

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	15657163
	Filing Date	2017-07-23
	First Named Inventor	Yehuda Binder
	Art Unit	
	Examiner Name	
	Attorney Docket Number	BINDER-014-US3

EXAMINER SIGNATURE			
Examiner Signature		Date Considered	

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

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	15657163
	Filing Date	2017-07-23
	First Named Inventor	Yehuda Binder
	Art Unit	
	Examiner Name	
	Attorney Docket Number	BINDER-014-US3

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Yehuda Binder/	Date (YYYY-MM-DD)	2017-08-16
Name/Print	Yehuda Binder	Registration Number	73612

This collection of information is required by 37 CFR 1.97 and 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 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt

EFS ID:	30102833
Application Number:	15657163
International Application Number:	
Confirmation Number:	1088
Title of Invention:	SYSTEM AND METHOD FOR SERVER-BASED CONTROL
First Named Inventor/Applicant Name:	Yehuda BINDER
Customer Number:	131926
Filer:	Yehuda Binder
Filer Authorized By:	
Attorney Docket Number:	BINDER-014-US3
Receipt Date:	17-AUG-2017
Filing Date:	23-JUL-2017
Time Stamp:	05:38:00
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	Information Disclosure Statement (IDS) Form (SB08)	IDS6.pdf	1035774 017badbe162141b3143e57b8482dad9304139920	no	6

Warnings:

Information:	
Total Files Size (in bytes):	1035774

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

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

May Patents Ltd. c/o Dorit Shem-Tov
P.O.B 7230
Ramat-Gan 52171-02 IL ISRAEL

MAILED
AUG 10 2017
OFFICE OF PETITIONS

Doc Code: TRACK1.GRANT

Decision Granting Request for Prioritized Examination (Track I or After RCE)	Application No.: 15/657,163

1. THE REQUEST FILED July 23, 2017 IS **GRANTED.**

The above-identified application has met the requirements for prioritized examination

A. ☒ for an original nonprovisional application (Track I).
B. ☐ for an application undergoing continued examination (RCE).

2. **The above-identified application will undergo prioritized examination.** The application will be accorded special status throughout its entire course of prosecution until one of the following occurs:

A. filing a **petition for extension of time** to extend the time period for filing a reply;
B. filing an **amendment to amend the application to contain more than four independent claims, more than thirty total claims**, or a multiple dependent claim;
C. filing a **request for continued examination**;
D. filing a notice of appeal;
E. filing a request for suspension of action;
F. mailing of a notice of allowance;
G. mailing of a final Office action;
H. completion of examination as defined in 37 CFR 41.102; or
I. abandonment of the application.

Telephone inquiries with regard to this decision should be directed to Brian W. Brown at 571-272-5338.

/Brian W. Brown/
[*Signature*]

Petitions Examiner, Office of Petitions
(Title)

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	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
15/657,163	07/23/2017	2447	1730	BINDER-014-US3	30	1

CONFIRMATION NO. 1088

131926
May Patents Ltd. c/o Dorit Shem-Tov
P.O.B 7230
Ramat-Gan, 5217102
ISRAEL

FILING RECEIPT

OC000000093242477

Date Mailed: 08/04/2017

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

Yehuda BINDER, Ramat Gan, ISRAEL;
Benjamin MAYTAL, Mevasseret Zion, ISRAEL;

Applicant(s)

May Patents Ltd., Hod Hasharon, ISRAEL;

Power of Attorney: The patent practitioners associated with Customer Number 131926

Domestic Priority data as claimed by applicant

This application is a CON of 13/733,634 01/03/2013
which claims benefit of 61/584,500 01/09/2012
and claims benefit of 61/620,129 04/04/2012
and claims benefit of 61/637,030 04/23/2012
and claims benefit of 61/647,034 05/15/2012

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None.
Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: No

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 08/03/2017

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 15/657,163**

Projected Publication Date: 11/16/2017

Non-Publication Request: No

Early Publication Request: No
**** SMALL ENTITY ****
Title

SYSTEM AND METHOD FOR SERVER-BASED CONTROL

Preliminary Class

709

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

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

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

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

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

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

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

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

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

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

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 15/657,163

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	70		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	300		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	30 minus 20 =	* 10	x 40 =	400	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	1 minus 3 =	*	x 210 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 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).			600			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	1730		TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)	OR	RATE($)	ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							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 found in the appropriate box in column 1.

MAY PATENTS LTD.
Yehuda BINDER, U.S. Patent Agent
B.Sc.E.E.; M.Sc.E.E; M.B.A

July 23, 2017

U.S. Patent and Trademark Office (USPTO)
Customer Service Window
Mail Stop Patent Application
401 Dulany Street
Alexandria, VA 22314

Re: **New Utility Patent Application in U.S.**
Applicant(s): May Patents Ltd.
Title: SYSTEM AND METHOD FOR SERVER BASED CONTROL
Attorney Docket No.: BINDER-014-US3

Sir/Madam,

Attached herewith is the above-identified application for Letters Patent including:

1. A request for prioritized examination under 37 CFR 1.102(e) (PTO/SB/424);
2. Applicant asserts small entity status. See 37 CFR 1.27.
3. Application Data Sheet (PTO/AIA/14);
4. Specification (227 pages), Claims 1-30 (4 pages) and abstract (1 page).
5. Sixty (60) sheets of Drawings (Figures 1-25a)
6. Declaration

   [ ] Newly executed [X] Copy from prior application no. 13/733,634
7. Assignment submitted through EPAS

   [ ] Newly executed [X] Copy from prior application no. 13/733,634
8. Power of Attorney
9. Information Disclosure Statement (PTO/SB/08).
10. Certain documents were previously filed or cited to the USPTO in the prior application 13/733,634, which is relied upon under 35 U.S.C. § 120.

    Applicant(s) identify these documents by attaching an Information Disclosure Statement listing these documents and request that they be considered and made of record in accordance with 37 CFR § 1.98(d). Per Section 1.98(d),

    copies of these documents need not be filed in the application.

e-mail: yehuda@maypatents.com; Mobile: 054-4444577

MAY PATENTS LTD.
Yehuda BINDER, U.S. Patent Agent
B.Sc.E.E.; M.Sc.E.E; M.B.A

11. Electronic Payment in the amount of US$ 4,130 is being made by deposit account no. 506726 to cover filing fee calculated as follows:

Application as Filed				**Fee (US$)**
Basic filing fee				70.00
Search Fee				300.00
Examination Fee				360.00
Publication Fee				130.00
Prioritized Examination Processing Fee				70.00
Prioritized Examination Fee				2,000.00
Total Sheets	**Extra Sheets**		**Rate**	
292/100	192/50		200.00	800.00
Claims	**# Filed**	**# Extra**	**Rate**	
Total Claims	1-30	10	40.00	400.00
Independent Claims	1	--	210.00	--
Multiple Dependent Claim			390.00	--
Total Filing Fee				4,130.00

12. As in the prior application 13/733,634, please associate the above referenced application with **Customer No. 131926**.
13. The Correspondence Address associated with **Customer No. 131926.**

Submitted by,
May Patents Ltd.

By: / Yehuda Binder /
Yehuda Binder
Registration No. 73,612

e-mail: yehuda@maypatents.com; Mobile: 054-4444577

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	SYSTEM AND METHOD FOR SERVER BASED CONTROL
First Named Inventor/Applicant Name:	Yehuda BINDER
Filer:	Yehuda Binder
Attorney Docket Number:	BINDER-014-US3

Filed as Small Entity

Filing Fees for Track I Prioritized Examination - Nonprovisional Application under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
UTILITY FILING FEE (ELECTRONIC FILING)	4011	1	70	70
UTILITY SEARCH FEE	2111	1	300	300
UTILITY EXAMINATION FEE	2311	1	360	360
REQUEST FOR PRIORITIZED EXAMINATION	2817	1	2000	2000
Pages:				
UTILITY APPL SIZE FEE PER 50 SHEETS >100	2081	3	200	600
Claims:				
CLAIMS IN EXCESS OF 20	2202	10	40	400

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous-Filing:				
PUBL. FEE- EARLY, VOLUNTARY, OR NORMAL	1504	1	0	0
PROCESSING FEE, EXCEPT PROV. APPLS.	2830	1	70	70
Petition:				
Patent-Appeals-and-Interference:				
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Electronic Acknowledgement Receipt	
EFS ID:	29862850
Application Number:	15657163
International Application Number:	
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Title of Invention:	SYSTEM AND METHOD FOR SERVER BASED CONTROL
First Named Inventor/Applicant Name:	Yehuda BINDER
Customer Number:	131926
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The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	TrackOne Request	sb0424.pdf	140393 b35bf38bd655baa687f0ed6a1eea387f1d156381	no	2
Warnings:					
Information:					
2	Power of Attorney	Signed-POA.pdf	1080282 805aa9fe1acd167f167563c42092513fdb5855ea	no	1
Warnings:					
Information:					
3	Specification	Spec.pdf	14503896 515ee9b5c87974d810297c2d47eea6fdfb391eb3	no	227
Warnings:					
Information:					
4	Claims	Claims.pdf	149295 44d817c3146dd8cd553e0c1d3f4ef84e24fdbcb7	no	4
Warnings:					
Information:					
5	Abstract	Abstract.pdf	121234 e70e8fdc0574a4dea99013d344aef58ae8551a11	no	1
Warnings:					
Information:					
6	Drawings-only black and white line drawings	Drawings.pdf	2179130 bb100c544ecfbdd5b0b015bbe13ebf0a3d24ec92	no	60
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7	Application Data Sheet	aia-ADS.pdf	1819359 8fb19953151958e9d750f9c86f1c1ae62358c3dc	no	7
Warnings:					
Information:					
8	Oath or Declaration filed	Signed-declaration-BM.pdf	164860 9c4690ab621ea1ac9db003f7be0dafb8002ec1f7	no	2
Warnings:					
Information:					
9	Oath or Declaration filed	Signed-declaration-YB.pdf	76285 5f4c0a52cf291d9cebb2127a60dd7f660e5efc43	no	1
Warnings:					
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10	Information Disclosure Statement (IDS) Form (SB08)	IDS1.pdf	1242892 2b9f3168cfce40a440d658ff8f7a2e67f40f74ca	no	10
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11	Information Disclosure Statement (IDS) Form (SB08)	IDS2.pdf	970584 080c47ae68786351cdf49ad48fb620a783f539b5	no	8
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12	Information Disclosure Statement (IDS) Form (SB08)	IDS3.pdf	693150 922c3dce1a3b5fdcdd99ee6b2d38c466e9295350	no	6
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13	Information Disclosure Statement (IDS) Form (SB08)	IDS4.pdf	1739353 3cfc29e935d96a2259df168d03dc1149695ad2a1	no	13

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14	Information Disclosure Statement (IDS) Form (SB08)	IDS5.pdf	1770453 769e8dcc47db7a794dd39959268b38ff0ee7e334	no	13
Warnings:					
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15	Transmittal of New Application	Transmittal-letter.pdf	368624 e86e67b17c444d8b11c7becdf6d6117c8369faf5	no	2
Warnings:					
Information:					
16	Fee Worksheet (SB06)	fee-info.pdf	42916 ecb0510fdbec80490beae3e84a9e657136b61166	no	2
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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.

Doc Code: TRACK1.REQ
Document Description: TrackOne Request

PTO/SB/424 (12-11)

CERTIFICATION AND REQUEST FOR PRIORITIZED EXAMINATION UNDER 37 CFR 1.102(e) (Page 1 of 1)

First Named Inventor:	Yehuda Binder	Nonprovisional Application Number (if known):	
Title of Invention:	SYSTEM AND METHOD FOR SERVER BASED CONTROL		

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS PRIORITIZED EXAMINATION FOR THE ABOVE-IDENTIFIED APPLICATION.

1. The processing fee set forth in 37 CFR 1.17(i), the prioritized examination fee set forth in 37 CFR 1.17(c), and if not already paid, the publication fee set forth in 37 CFR 1.18(d) have been filed with the request. The basic filing fee, search fee, examination fee, and any required excess claims and application size fees are filed with the request or have been already been paid.

2. The application contains or is amended to contain no more than four independent claims and no more than thirty total claims, and no multiple dependent claims.

3. The applicable box is checked below:

I. ☑ Original Application (Track One) - Prioritized Examination under § 1.102(e)(1)

i. (a) The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a). This certification and request is being filed with the utility application via EFS-Web.

---OR---

(b) The application is an original nonprovisional plant application filed under 35 U.S.C. 111(a). This certification and request is being filed with the plant application in paper.

ii. An executed oath or declaration under 37 CFR 1.63 is filed with the application.

II. ☐ Request for Continued Examination - Prioritized Examination under § 1.102(e)(2)

i. A request for continued examination has been filed with, or prior to, this form.
ii. If the application is a utility application, this certification and request is being filed via EFS-Web.
iii. The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a), or is a national stage entry under 35 U.S.C. 371.
iv. This certification and request is being filed prior to the mailing of a first Office action responsive to the request for continued examination.
v. No prior request for continued examination has been granted prioritized examination status under 37 CFR 1.102(e)(2).

Signature /Yehuda Binder/	Date 2017-07-23
Name (Print/Typed) Yehuda Binder	Practitioner Registration Number 73612

Note: *Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required in accordance with 37 CFR 1.33 and 11.18. Please see 37 CFR 1.4(d) for the form of the signature. If necessary, submit multiple forms for more than one signature, see below*.*

☑ *Total of 1 forms are submitted.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PTO/SB/81 (01-09)
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POWER OF ATTORNEY OR REVOCATION OF POWER OF ATTORNEY WITH A NEW POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS

Application Number	
Filing Date	
First Named Inventor	BINDER, Yehuda
Title	SYSTEM AND METHOD FOR SERVER BASED CONTROL
Art Unit	
Examiner Name	
Attorney Docket Number	BINDER-014-US3

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

☐ A Power of Attorney is submitted herewith.

OR

☒ I hereby appoint Practitioner(s) associated with the following Customer 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: 131,926

OR

☐ I hereby appoint Practitioner(s) named below 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:

Practitioner(s) Name	Registration Number

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:

OR

☐ Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

I am the:

☒ Applicant/Inventor.

OR

☐ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) (Form PTO/SB/96) submitted herewith or filed on _____

SIGNATURE of Applicant or Assignee of Record

Signature		Date	JULY 23, 2017
Name	Yehuda BINDER	Telephone	
Title and Company	CEO of May Patents Ltd.		

May Patents Ltd.
P.O. Box 1410-9 Ramat Gan 51-443410-9

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

☒ *Total of 1 forms are submitted.

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

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System and Method for Server-Based Control

TECHNICAL FIELD

This disclosure relates generally to an apparatus and method for control such as in a building or in a vehicle using a server implementing gateway or control functionalities.

BACKGROUND

The Internet is a global system of interconnected computer networks that use the standardized Internet Protocol Suite (TCP/IP), including Transmission Control Protocol (TCP) and the Internet Protocol (IP), to serve billions of users worldwide. It is a network of networks that consists of millions of private, public, academic, business, and government networks, of local to global scope, that are linked by a broad array of electronic and optical networking technologies. The Internet carries a vast range of information resources and services, such as the interlinked hypertext documents on the World Wide Web (WWW) and the infrastructure to support electronic mail. The Internet backbone refers to the principal data routes between large, strategically interconnected networks and core routers in the Internet. These data routes are hosted by commercial, government, academic and other high-capacity network centers, the Internet exchange points and network access points that interchange Internet traffic between the countries, continents and across the oceans of the world. Traffic interchange between Internet service providers (often Tier 1 networks) participating in the Internet backbone exchange traffic by privately negotiated interconnection agreements, primarily governed by the principle of settlement-free peering.

The Internet Protocol (IP) is the principal communications protocol used for relaying datagrams (packets) across a network using the Internet Protocol Suite. Responsible for routing packets across network boundaries, it is the primary protocol that establishes the Internet. IP is the primary protocol in the Internet Layer of the Internet Protocol Suite and has the task of delivering datagrams from the source host to the destination host based on their addresses. For this purpose, IP defines addressing methods and structures for datagram encapsulation. Internet Protocol Version 4 (IPv4) is the dominant protocol of the Internet. IPv4 is described in Internet Engineering Task Force (IETF) Request for Comments (RFC) 791 and RFC 1349, and the successor, Internet Protocol Version 6 (IPv6), is currently active and in growing deployment worldwide. IPv4 uses 32-bit

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addresses (providing 4 billion: 4.3×10^9 addresses), while IPv6 uses 128-bit addresses (providing 340 undecillion or 3.4×10^{38} addresses), as described in RFC 2460.

The Internet Protocol is responsible for addressing hosts and routing datagrams (packets) from a source host to the destination host across one or more IP networks. For this purpose the Internet Protocol defines an addressing system that has two functions. Addresses identify hosts and provide a logical location service. Each packet is tagged with a header that contains the meta-data for the purpose of delivery. This process of tagging is also called encapsulation. IP is a connectionless protocol for use in a packet-switched Link Layer network, and does not need circuit setup prior to transmission. The aspects of delivery guaranteeing, proper sequencing, avoidance of duplicate delivery, and data integrity are addressed by an upper transport layer protocol (e.g., TCP - Transmission Control Protocol and UDP – User Datagram Protocol).

The main aspects of the IP technology are IP addressing and routing. Addressing refers to how end hosts become assigned IP addresses and how sub-networks of IP host addresses are divided and grouped together. IP routing is performed by all hosts, but most importantly by internetwork routers, which typically use either Interior Gateway Protocols (IGPs) or External Gateway Protocols (EGPs) to help make IP datagram forwarding decisions across IP connected networks. Core routers serving in the Internet backbone commonly use the Border Gateway Protocol (BGP) as per RFC 4098 or Multi-Protocol Label Switching (MPLS). Other prior art publications relating to Internet related protocols and routing include the following chapters of the publication number 1-587005-001-3 by Cisco Systems, Inc. (7/99) entitled: "Internetworking Technologies Handbook", which are all incorporated in their entirety for all purposes as if fully set forth herein: Chapter 5: "Routing Basics" (pages 5-1 to 5-10), Chapter 30: "Internet Protocols" (pages 30-1 to 30-16), Chapter 32: "IPv6" (pages 32-1 to 32-6), Chapter 45: "OSI Routing" (pages 45-1 to 45-8) and Chapter 51: "Security" (pages 51-1 to 51-12), as well as IBM Corporation, International Technical Support Organization Redbook Documents No. GG24-4756-00 entitled: "Local area Network Concepts and Products: LAN Operation Systems and management", 1st Edition May 1996, Redbook Document No. GG24-4338-00 entitled: "Introduction to Networking Technologies", 1st Edition April 1994, Redbook Document No. GG24-2580-01 "IP Network Design Guide", 2nd Edition June 1999, and Redbook Document No. GG24-3376-07 "TCP/IP Tutorial and Technical Overview", ISBN 0738494682 8th Edition Dec. 2006, which are incorporated in their entirety for all purposes as if fully set forth herein.

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A Wireless Mesh Network (WMN) and Wireless Distribution Systems (WDS) are known in the art to be a communication network made up of clients, mesh routers and gateways organized in a mesh topology and connected using radio. Such wireless networks may be based on DSR as the routing protocol. WMNs are standardized in IEEE 802.11s and described in a slide-show by W. Steven Conner, Intel Corp. *et al.* entitled: "IEEE 802.11s Tutorial" presented at the IEEE 802 Plenary, Dallas on Nov. 13, 2006, in a slide-show by Eugen Borcoci of University Politehnica Bucharest, entitled: "Wireless Mesh Networks Technologies: Architectures, Protocols, Resource Management and Applications", presented in INFOWARE Conference on August 22-29th 2009 in Cannes, France, and in an IEEE Communication magazine paper by Joseph D. Camp and Edward W. Knightly of Electrical and Computer Engineering, Rice University, Houston, TX, USA, entitled: "The IEEE 802.11s Extended Service Set Mesh Networking Standard", which are incorporated in their entirety for all purposes as if fully set forth herein. The arrangement described herein can be equally applied to such wireless networks, wherein two clients exchange information using different paths by using mesh routers as intermediate and relay servers. Commonly in wireless networks, the routing is based on MAC addresses. Hence, the above discussion relating to IP addresses applies in such networks to using the MAC addresses for identifying the client originating the message, the mesh routers (or gateways) serving as the relay servers, and the client serving as the ultimate destination computer.

The Internet architecture employs a client-server model, among other arrangements. The terms 'server' or 'server computer' relates herein to a device or computer (or a plurality of computers) connected to the Internet and is used for providing facilities or services to other computers or other devices (referred to in this context as 'clients') connected to the Internet. A server is commonly a host that has an IP address and executes a 'server program', and typically operates as a socket listener. Many servers have dedicated functionality such as web server, Domain Name System (DNS) server (described in RFC 1034 and RFC 1035), Dynamic Host Configuration Protocol (DHCP) server (described in RFC 2131 and RFC 3315), mail server, File Transfer Protocol (FTP) server and database server. Similarly, the term 'client' herein refers to a program or to a device or a computer (or a series of computers) executing this program, which accesses a server over the Internet for a service or a resource. Clients commonly initiate connections that a server may accept. For non-limiting example, web browsers are clients that connect to web servers for retrieving web pages, and email clients connect to mail storage servers for retrieving mails.

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Software as a Service (SaaS) is a Software Application (SA) supplied by a service provider, namely, a SaaS Vendor. The service is supplied and consumed over the internet, thus eliminating requirements to install and run applications locally on a site of a customer as well as simplifying maintenance and support. Particularly it is advantageous in massive business applications. Licensing is a common form of billing for the service and it is paid periodically. SaaS is becoming ever more common as a form of SA delivery over the Internet and is being facilitated in a technology infrastructure called "Cloud Computing". In this form of SA delivery, where the SA is controlled by a service provider, a customer may experience stability and data security issues. In many cases the customer is a business organization that is using the SaaS for business purposes such as business software, hence, stability and data security are primary requirements.

The term "Cloud computing" as used herein is defined as a technology infrastructure facilitating supplement, consumption and delivery of IT services. The IT services are internet based and may involve elastic provisioning of dynamically scalable and time virtualized resources. The term "Software as a Service (SaaS)" as used herein in this application, is defined as a model of software deployment whereby a provider licenses an SA to customers for use as a service on demand. The term "customer" as used herein in this application, is defined as a business entity that is served by an SA, provided on the SaaS platform. A customer may be a person or an organization and may be represented by a user that responsible for the administration of the application in aspects of permissions configuration, user related configuration, and data security policy.

The term "SaaS Platform" as used herein in this application is defined as a computer program that acts as a host to SAs that reside on it. Essentially, a SaaS platform can be considered as a type of specialized SA server. The platform manages underlying computer hardware and software resources and uses these resources to provide hosted SAs with multi-tenancy and on-demand capabilities, commonly found in SaaS applications. Generally, the hosted SAs are compatible with SaaS platform and support a single group of users. The platform holds the responsibility for distributing the SA as a service to multiple groups of users over the internet. The SaaS Platform can be considered as a layer of abstraction above the traditional application server, creating a computing platform that parallels the value offered by the traditional operating system, only in a web-centric fashion. The SaaS platform responds to requirements of software developers. The requirements are to reduce time and difficulty involved in developing highly available SAs, and on-demand enterprise grade business SAs.

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ZigBee is a specification for a suite of high level communication protocols using small, low-power digital radios based on an IEEE 802 standard for personal area networks. Applications include wireless light switches, electrical meters with in-home-displays, and other consumer and industrial equipment that require short-range wireless transfer of data at relatively low rates. The technology defined by the ZigBee specification is intended to be simpler and less expensive than other WPANs, such as Bluetooth. ZigBee is targeted at radio-frequency (RF) applications that require a low data rate, long battery life, and secure networking. ZigBee has a defined rate of 250 kbps suited for periodic or intermittent data or a single signal transmission from a sensor or input device.

ZigBee builds upon the physical layer and medium access control defined in IEEE standard 802.15.4 (2003 version) for low-rate WPANs. The specification goes on to complete the standard by adding four main components: network layer, application layer, ZigBee Device Objects (ZDOs) and manufacturer-defined application objects which allow for customization and favor total integration. Besides adding two high-level network layers to the underlying structure, the most significant improvement is the introduction of ZDOs. These are responsible for a number of tasks, which include keeping of device roles, management of requests to join a network, device discovery and security. Because ZigBee nodes can go from sleep to active mode in 30 ms or less, the latency can be low and devices can be responsive, particularly compared to Bluetooth wake-up delays, which are typically around three seconds. ZigBee nodes can sleep most of the time, thus average power consumption can be lower, resulting in longer battery life.

There are three different types of ZigBee devices: ZigBee coordinator (ZC), which are the most capable device, the coordinator forms the root of the network tree and might bridge to other networks. There is exactly one ZigBee coordinator in each network since it is the device that started the network originally. It is able to store information about the network, including acting as the Trust Center & repository for security keys. ZigBee Router (ZR) may be running an application function as well as can acting as an intermediate router, passing on data from other devices. ZigBee End Device (ZED) contains functionality to talk to the parent node (either the coordinator or a router). This relationship allows the node to be asleep a significant amount of the time thereby giving long battery life. A ZED requires the least amount of memory, and therefore can be less expensive to manufacture than a ZR or ZC.

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The protocols build on recent algorithmic research (Ad-hoc On-demand Distance Vector, neuRFon) to automatically construct a low-speed ad-hoc network of nodes. In most large network instances, the network will be a cluster of clusters. It can also form a mesh or a single cluster. The current ZigBee protocols support beacon and non-beacon enabled networks. In non-beacon-enabled networks, an unslotted CSMA/CA channel access mechanism is used. In this type of network, ZigBee Routers typically have their receivers continuously active, requiring a more robust power supply. However, this allows for heterogeneous networks in which some devices receive continuously, while others only transmit when an external stimulus is detected.

In beacon-enabled networks, the special network nodes called ZigBee Routers transmit periodic beacons to confirm their presence to other network nodes. Nodes may sleep between the beacons, thus lowering their duty cycle and extending their battery life. Beacon intervals depend on the data rate; they may range from 15.36 milliseconds to 251.65824 seconds at 250 Kbit/s, from 24 milliseconds to 393.216 seconds at 40 Kbit/s and from 48 milliseconds to 786.432 seconds at 20 Kbit/s. In general, the ZigBee protocols minimize the time the radio is on, so as to reduce power use. In beaconing networks, nodes only need to be active while a beacon is being transmitted. In non-beacon-enabled networks, power consumption is decidedly asymmetrical: some devices are always active, while others spend most of their time sleeping.

Except for the Smart Energy Profile 2.0, current ZigBee devices conform to the IEEE 802.15.4-2003 Low-Rate Wireless Personal Area Network (LR-WPAN) standard. The standard specifies the lower protocol layers—the PHYsical layer (PHY), and the Media Access Control (MAC) portion of the Data Link Layer (DLL). The basic channel access mode is "Carrier Sense, Multiple Access / Collision Avoidance" (CSMA/CA). That is, the nodes talk in the same way that people converse; they briefly check to see that no one is talking before they start. There are three notable exceptions to the use of CSMA. Beacons are sent on a fixed timing schedule, and do not use CSMA. Message acknowledgments also do not use CSMA. Finally, devices in Beacon Oriented networks that have low latency real-time requirements may also use Guaranteed Time Slots (GTS), which by definition do not use CSMA.

Z-Wave is a wireless communications protocol by the Z-Wave Alliance (http://www.z-wave.com) designed for home automation, specifically for remote control applications in residential and light commercial environments. The technology uses a low-power RF radio embedded or retrofitted into home electronics devices and systems, such as lighting, home access control,

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entertainment systems and household appliances. Z-Wave communicates using a low-power wireless technology designed specifically for remote control applications. Z-Wave operates in the sub-gigahertz frequency range, around 900 MHz. This band competes with some cordless telephones and other consumer electronics devices, but avoids interference with WiFi and other systems that operate on the crowded 2.4 GHz band. Z-Wave is designed to be easily embedded in consumer electronics products, including battery operated devices such as remote controls, smoke alarms and security sensors.

Z-Wave is a mesh networking technology where each node or device on the network is capable of sending and receiving control commands through walls or floors and use intermediate nodes to route around household obstacles or radio dead spots that might occur in the home. Z-Wave devices can work individually or in groups, and can be programmed into scenes or events that trigger multiple devices, either automatically or via remote control. The Z-wave radio specifications include bandwidth of 9,600 bit/s or 40 Kbit/s, fully interoperable, GFSK modulation, and a range of approximately 100 feet (or 30 meters) assuming "open air" conditions, with reduced range indoors depending on building materials, etc. The Z-Wave radio uses the 900 MHz ISM band: 908.42 MHz (United States); 868.42 MHz (Europe); 919.82 MHz (Hong Kong); 921.42 MHz (Australia/New Zealand).

Z-Wave uses a source-routed mesh network topology and has one or more master controllers that control routing and security. The devices can communicate to another by using intermediate nodes to actively route around and circumvent household obstacles or radio dead spots that might occur. A message from node A to node C can be successfully delivered even if the two nodes are not within range, providing that a third node B can communicate with nodes A and C. If the preferred route is unavailable, the message originator will attempt other routes until a path is found to the "C" node. Therefore a Z-Wave network can span much farther than the radio range of a single unit; however with several of these hops a delay may be introduced between the control command and the desired result. In order for Z-Wave units to be able to route unsolicited messages, they cannot be in sleep mode. Therefore, most battery-operated devices are not designed as repeater units. A Z-Wave network can consist of up to 232 devices with the option of bridging networks if more devices are required.

Most existing offices and some of the newly built buildings facilitate the network structure based on dedicated wiring. However, implementing such a network in existing buildings typically

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requires installation of new wiring infrastructure. Such installation of new wiring may be impractical, expensive and problematic. As a result, many technologies (referred to as "no new wires" technologies) have been proposed in order to facilitate a LAN in a building without adding new wiring. Some of these techniques use existing utility wiring installed primarily for other purposes such as telephone, electricity, cable television (CATV), and so forth. Such approach offers the advantage of being able to install such systems and networks without the additional and often substantial cost of installing separate wiring within the building.

The technical aspect for allowing the wiring to carry both the service (such as telephony, electricity and CATV) and the data communication signals commonly involves using an FDM technique (Frequency Division Multiplexing). In such configuration, the service signal and the data communication signals are carried across the respective utility wiring each using a distinct frequency spectrum band. The concept of FDM is known in the art, and provides means of splitting the bandwidth carried by a medium such as wiring. In the case of a telephone wiring carrying both telephony and data communication signals, the frequency spectrum is split into a low-frequency band capable of carrying an analog telephony signal and a high-frequency band capable of carrying data communication or other signals.

A network in a house based on using powerline-based home network is also known in the art. The medium for networking is the in-house power lines, which is used for carrying both the AC power (mains) power and the data communication signals. A PLC (Power Line Carrier) modem converts a data communication signal (such as Ethernet IEEE802.3) to a signal which can be carried over the power lines, without affecting and being affected by the power signal available over those wires. A consortium named HomePlug (www.homeplug.org) is active in standardizing powerline technologies. A powerline communication system is described in U.S. Patent No. 6,243,571 to Bullock *et al.*, which also provides a comprehensive list of prior art publications referring to powerline technology and applications. A non-limiting example for such PLC modem housed as a snap-on module is HomePlug1.0 based Ethernet-to-Powerline Bridge model DHP-100 from D-Link® Systems, Inc. of Irvine, California, USA. Outlets with built in PLC modems for use with combined data and power using powerlines are described in U.S. Patent Application Publication 2003/0062990 to Schaeffer *et al.* entitled 'Powerline Bridge Apparatus'. Such power outlets are available as part of PlugLAN™ by Asoka USA Corporation of San Carlos, CA, USA.

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Similarly, carrying data over existing in home CATV coaxial cabling is also known in the art, for example in U.S. Patent Application Publication No. 2002/0166124 to Gurantz *et al.* A non-limiting example of home networking over CATV coaxial cables using outlets is described in U.S. Patent Application Publication No. 2002/0194383 to Cohen *et al.* Such outlets are available as part of HomeRAN™ system from TMT Ltd. of Jerusalem, Israel.

The term "telephony" herein denotes in general any kind of telephone service, including analog and digital service, such as Integrated Services Digital Network (ISDN). Analog telephony, popularly known as "Plain Old Telephone Service" ("POTS") has been in existence for over 100 years, and is suited for the transmission and switching of voice signals in the 300-3400 Hz portion (or "voice band" or "telephone band") of the audio spectrum. The familiar POTS network supports real-time, low-latency, high-reliability, moderate-fidelity voice telephony, and is capable of establishing a session between two end-points, each using an analog telephone set.

The terms "telephone", "telephone set", and "telephone device" herein denote any apparatus, without limitation, which can connect to a Public Switch Telephone Network ("PSTN"), including apparatus for both analog and digital telephony, non-limiting examples of which are analog telephones, digital telephones, facsimile ("fax") machines, automatic telephone answering machines, voice modems, and data modems. In-home telephone service usually employs two or four wires, to which telephone sets are connected via telephone outlets.

Similarly to the powerlines and CATV cabling described above, it is often desirable to use existing telephone wiring simultaneously for both telephony and data networking. In this way, establishing a new local area network in a home or other building is simplified, because there is no need to install additional wiring. Using FDM technique to carry video over active residential telephone wiring is disclosed by U.S Patent No. 5,010,399 to Goodman *et al.* entitled: "Video Transmission and Control System Utilizing Internal Telephone Lines", and U.S. Patent No. 5,621,455 to Rogers *et al.* entitled: "Video Modem for Transmitting Video Data over Ordinary Telephone Wires", which are both incorporated in their entirety for all purposes as if fully set forth herein.

Existing products for carrying data digitally over residential telephone wiring concurrently with active telephone service by using FDM commonly uses a technology known as HomePNA (Home Phoneline Networking Alliance) (www.homepna.org). This phoneline interface has been standardized as ITU-T (ITU Telecommunication Standardization Sector) recommendation G.989.1.

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The HomePNA technology is described in U.S. Patent No. 6,069,899 to Foley, U.S. Patent No. 5,896,443 to Dichter, U.S. Patent Application No. 2002/0019966 to Yagil *et al.*, U.S. Patent Application Publication No. 2003/0139151 to Lifshitz *et al.*, and others. The available bandwidth over the wiring is split into a low-frequency band capable of carrying an analog telephony signal (POTS), and a high-frequency band is allocated for carrying data communication signals. In such FDM based configuration, telephony is not affected, while a data communication capability is provided over existing telephone wiring within a home.

Prior art technologies for using the in-place telephone wiring for data networking are based on single carrier modulation techniques, such as AM (Amplitude Modulation), FM (Frequency Modulation) and PM (Phase Modulation), as well as bit encoding techniques such as QAM (Quadrature Amplitude Modulation) and QPSK (Quadrature Phase Shift Keying). Spread spectrum technologies, to include both DSSS (Direct Sequence Spread Spectrum) and FHSS (Frequency Hopping Spread Spectrum) are known in the art. Spread spectrum commonly employs Multi-Carrier Modulation (MCM) such as OFDM (Orthogonal Frequency Division Multiplexing). OFDM and other spread spectrum are commonly used in wireless communication systems, and in particular in WLAN networks. As explained in the document entitled "IEEE 802.11g Offers Higher Data Rates and Longer Range" to Jim Zyren *et al.* by Intersil which is hereby incorporated by reference, multi-carrier modulation (such as OFDM) is employed in such systems in order to overcome the signal impairment due to multipath.

A popular approach to home networking (as well as office and enterprise environments) is communication via radio frequency (RF) distribution system that transports RF signals throughout a building to and from data devices. Commonly referred to as Wireless Local Area Network (WLAN), such communication makes use of the Industrial, Scientific and Medical (ISM) frequency spectrum. In the US, three of the bands within the ISM spectrum are the A band, 902-928 MHz; the B band, 2.4-2.484 GHz (a.k.a. 2.4 GHz); and the C band, 5.725-5.875 GHz (a.k.a. 5 GHz). Overlapping and / or similar bands are used in different regions such as Europe and Japan.

In order to allow interoperability between equipment manufactured by different vendors, few WLAN standards have evolved, as part of the IEEE 802.11 standard group, branded as WiFi (www.wi-fi.org). IEEE 802.11b describes a communication using the 2.4GHz frequency band and supporting communication rate of 11Mb/s, IEEE 802.11a uses the 5GHz frequency band to carry 54MB/s and IEEE 802.11g uses the 2.4 GHz band to support 54Mb/s.

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A node / client with a WLAN interface is commonly referred to as STA (Wireless Station / Wireless client). The STA functionality may be embedded as part of the data unit, or alternatively be a dedicated unit, referred to as bridge, coupled to the data unit. While STAs may communicate without any additional hardware (ad-hoc mode), such network usually involves Wireless Access Point (a.k.a. WAP or AP) as a mediation device. The WAP implements the Basic Stations Set (BSS) and / or ad-hoc mode based on Independent BSS (IBSS). STA, client, bridge and WAP will be collectively referred to hereon as WLAN unit.

Bandwidth allocation for IEEE 802.11g wireless in the U.S. allows multiple communication sessions to take place simultaneously, where eleven overlapping channels are defined spaced 5MHz apart, spanning from 2412 MHz as the center frequency for channel number 1, via channel 2 centered at 2417 MHz and 2457 MHz as the center frequency for channel number 10, up to channel 11 centered at 2462 MHz. Each channel bandwidth is 22MHz, symmetrically (+/-11 MHz) located around the center frequency. In the transmission path, first the baseband signal (IF) is generated based on the data to be transmitted, using 256 QAM (Quadrature Amplitude Modulation) based OFDM (Orthogonal Frequency Division Multiplexing) modulation technique, resulting a 22 MHz (single channel wide) frequency band signal. The signal is then up converted to the 2.4 GHz (RF) and placed in the center frequency of required channel, and transmitted to the air via the antenna. Similarly, the receiving path comprises a received channel in the RF spectrum, down converted to the baseband (IF) wherein the data is then extracted.

FIG.1 shows an arrangement **10** according to the prior art including a residence **19** which may be connected via the Internet **16** to many multiple servers, such as a server **17**. In the premises **19** there may be multiple internal networks, such as home network **14a** connecting the desktop computer **18a** and a home device **15a**, and other connected equipment may as well be connected. Similarly, home network **14b** is shown connecting desktop computer **18b** and a home device **15b**, and other connected equipment may as well be connected. A sensor network **12** may further be used, connecting sensor units **13a**, **13b** and **13c**. The sensor network **12** may be based on ZigBee protocol or another public or proprietary commercially accepted protocol, or any suitable protocol now known or becoming known to those skilled in the art in the present context. A gateway **11** is connected, via suitable ports, to the various networks in the residence **19**, and allows communication between devices in a specific network, between networks in the residence **19**, and further provides external connection to the Internet **16**, typically via a WAN network. While three

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internal networks **12**, **14a** and **14b** are shown in arrangement **10**, one, two, four, or any number of such internal networks may be equally deployed. Further, the various networks inside the premises **19** may be the same, similar or different. For example, the same or different network mediums may be used, such as wired or wireless networks, and the same or different network protocols may be used. Further, each of the networks may be a LAN (Local Area Network), WLAN (Wireless LAN), PAN (Personal Area Network), or WPAN (Wireless PAN). The gateway **11** is typically a dedicated hardware and software integrated device, and is based on a firmware and a processor. A prior-art architecture involving moving limited management functions of a home gateway onto network cloud is described in the paper entitled: "Home Network with Cloud Computing for Home Management", by Katsuya Suzuki and Masahiro Inoue, IEEE 15th International Symposium on Consumer Electronics, 2011, pages 421-425, which is incorporated in its entirety for all purposes as if fully set forth herein. The gateway **11** is known in the art and is sometimes referred to as Residential Gateway (RG) or Home Gateway, and serves to connect devices in the home (commonly via a home network) to the Internet or other WAN. Such RG may include a broadband modem (such as DSL or cable modem), a firewall, a router, a packet-switch, and a Wireless Access Point (WAP). The RG is typically manageable and support auto-configuration, and may support various type services, as well as Quality-of-Service (QoS). All the interconnections described herein may be achieved by direct connection of components or by indirect coupling through a suitable connector, interface or other hardware and/or software components enabling the exchange of signals between the coupled components.

There is a growing widespread use of the Internet for carrying multimedia, such as video and audio. Various audio services include Internet-radio stations and VoIP (Voice-over-IP). Video services over the Internet include video conferencing and IPTV (IP Television). In most cases, the multimedia service is a real-time (or near real-time) application, and thus sensitive to delays over the Internet. In particular, two-way services such a VoIP or other telephony services and video-conferencing are delay sensitive. In some cases, the delays induced by the encryption process, as well as the hardware / software costs associated with the encryption, render encryption as non-practical. Therefore, it is not easy to secure enough capacity of the Internet accessible by users to endure real-time communication applications such as Internet games, chatting, VoIP, MoIP (Multimedia-over-IP), etc. In this case, there may be a data loss, delay or severe jitter in the course of communication due to the property of an Internet protocol, thereby causing inappropriate real-

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time video communication. The following chapters of the publication number 1-587005-001-3 by Cisco Systems, Inc. (7/99) entitled: "Internetworking Technologies Handbook", relate to multimedia carried over the Internet, and are all incorporated in their entirety for all purposes as if fully set forth herein: Chapter 18: "Multiservice Access Technologies" (pages 18-1 to 18-10), and Chapter 19: "Voice / Data Integration Technologies" (pages 19-1 to 19-30).

VoIP systems in widespread use today fall into three groups: systems using the ITU-T H.323 protocol, systems using the SIP protocol, and systems that use proprietary protocols. H.323 is a standard for teleconferencing that was developed by the International Telecommunications Union (ITU). It supports full multimedia audio, video and data transmission between groups of two or more participants, and it is designed to support large networks. H.323 is network-independent: it can be used over networks using transport protocols other than TCP/IP. H.323 is still a very important protocol, but it has fallen out of use for consumer VoIP products due to the fact that it is difficult to make it work through firewalls that are designed to protect computers running many different applications. It is a system best suited to large organizations that possess the technical skills to overcome these problems.

SIP (for Session Initiation Protocol) is an Internet Engineering Task Force (IETF) standard signaling protocol for teleconferencing, telephony, presence and event notification and instant messaging. It provides a mechanism for setting up and managing connections, but not for transporting the audio or video data. It is probably now the most widely used protocol for managing Internet telephony. Like the IETF protocols, SIP is defined in a number of RFCs, principally RFC 3261. A SIP-based VoIP implementation may send the encoded voice data over the network in a number of ways. Most implementations use Real-time Transport Protocol (RTP), which is defined in RFC 3550. Both SIP and RTP are implemented on UDP, which, as a connectionless protocol, can cause difficulties with certain types of routers and firewalls. Usable SIP phones therefore also need to use STUN (for Simple Traversal of UDP over NAT), a protocol defined in RFC 3489 that allows a client behind a NAT router to find out its external IP address and the type of NAT device.

The connection of peripherals and memories to a processor may be via a bus. A communication link (such as Ethernet, or any other LAN, PAN or WAN communication link) may also be regarded as bus herein. A bus may be an internal bus (a.k.a. local bus), primarily designed to connect a processor or CPU to peripherals inside a computer system enclosure, such as connecting components over the motherboard or backplane. Alternatively, a bus may be an external bus,

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primarily intended for connecting the processor or the motherboard to devices and peripherals external to the computer system enclosure. Some buses may be doubly used as internal or as external buses. A bus may be of parallel type, where each word (address or data) is carried in parallel over multiple electrical conductors or wires; or alternatively, may be bit-serial, where bits are carried sequentially, such as one bit at a time. A bus may support multiple serial links or lanes, aggregated or bonded for higher bit-rate transport. Non-limiting examples of internal parallel buses include ISA (Industry Standard architecture); EISA (Extended ISA); NuBus (IEEE 1196); PATA - Parallel ATA (Advanced Technology Attachment) variants such as IDE, EIDE, ATAPI, SBus (IEEE 1496), VESA Local Bus (VLB), PCI and PC/104 variants (PC/104, PC/104 Plus, and PC/104 Express). Non-limiting examples of internal serial buses include PCIe (PCI Express), Serial ATA (SATA), SMBus, and Serial Peripheral Bus (SPI) bus. Non-limiting examples of external parallel buses include HIPPI (HIgh Performance Parallel Interface), IEEE-1284 ('Centronix'), IEEE-488 (a.k.a. GPIB – General Purpose Interface Bus) and PC Card / PCMCIA. Non-limiting examples of external serial buses include USB (Universal Serial Bus), eSATA and IEEE 1394 (a.k.a. Firewire). Non-limiting examples of buses that can be internal or external are Futurebus, InfiniBand, SCSI (Small Computer System Interface), and SAS (Serial Attached SCSI). The bus medium may be based on electrical conductors, commonly copper wires based cable (may be arranged as twisted-pairs) or a fiber-optic cable. The bus topology may use point-to-point, multi-drop (electrical parallel) and daisy-chain, and may further be based on hubs or switches. A point-to-point bus may be full-duplex, providing simultaneous, two-way transmission (and sometimes independent) in both directions, or alternatively a bus may be half-duplex, where the transmission can be in either direction, but only in one direction at a time. Buses are further commonly characterized by their throughput (data bit-rate), signaling rate, medium length, connectors and medium types, latency, scalability, quality-of-service, devices per connection or channel, and supported bus-width. A configuration of a bus for a specific environment may be automatic (hardware or software based, or both), or may involve user or installer activities such as software settings or jumpers. Recent buses are self-repairable, where spare connection (net) is provided which is used in the event of malfunction in a connection. Some buses support hot-plugging (sometimes known as hot swapping), where a connection or a replacement can be made, without significant interruption to the system or without the need to shut-off any power. A well-known example of this functionality is the Universal Serial Bus (USB) that allows users to add or remove peripheral components such as a

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mouse, keyboard, or printer. A bus may be defined to carry a power signal, either in separate dedicated cable (using separate and dedicated connectors), or commonly over the same cable carrying the digital data (using the same connector). Typically dedicated wires in the cable are used for carrying a low-level DC power level, such as 3.3VDC, 5VDC, 12VDC and any combination thereof. A bus may support master / slave configuration, where one connected node is typically a bus master (e.g., the processor or the processor-side), and other nodes (or node) are bussed slaves. A slave may not connect or transmit to the bus until given permission by the bus master. A bus timing, strobing, synchronization, or clocking information may be carried as a separate signal (e.g., clock signal) over a dedicated channel, such as separate and dedicated wired in a cable, or alternatively may use embedded clocking (a.k.a. self-clocking), where the timing information is encoded with the data signal, commonly used in line codes such as Manchester code, where the clock information occurs at the transition points. Any bus or connection herein may use proprietary specifications, or preferably be similar to, based on, substantially according to, or fully compliant with, an industry standard (or any variant thereof) such as those referred to as PCI Express, SAS, SATA, SCSI, PATA, InfiniBand, USB, PCI, PCI-X, AGP, Thunderbolt, IEEE 1394, FireWire and Fibre Channel.

In consideration of the foregoing, it would be an advancement in the art to provide an improved networking or gateway functionality method and system that is simple, secure, cost-effective, reliable, easy to use or sanitize, has a minimum part count, minimum hardware, and / or uses existing and available components, protocols, programs and applications for providing better security and additional functionalities, and provides a better user experience.

SUMMARY

Environment control networks are networks of sensors and controller which provide an optimized solution for an environment control. The environment can be a house, agricultural farm, city traffic systems etc. The sensors will provide information on the environmental conditions and events. The controller will allow automatic control or control by the user via the Internet. Presently, a dedicated hardware gateway is required to control the wireless network in each environment. The disclosure describes how the dedicated gateway can be replaced by a cloud server, offering much better cost, reliability and level of service.

Any communication or connection herein, such as the connection of peripherals in general, and memories in particular to a processor, may use a bus. A communication link (such as Ethernet,

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or any other LAN, PAN or WAN communication links may also be regarded as buses herein. A bus may be an internal bus, an external bus or both. A bus may be a parallel or a bit-serial bus. A bus may be based on a single or on multiple serial links or lanes. The bus medium may electrical conductors based such as wires or cables, or may be based on a fiber-optic cable. The bus topology may use point-to-point, multi-drop (electrical parallel) and daisy-chain, and may be based on hubs or switches. A point-to-point bus may be full-duplex, or half-duplex. Further, a bus may use proprietary specifications, or may be based on, similar to, substantially or fully compliant to an industry standard (or any variant thereof), and may be hot-pluggable. A bus may be defined to carry only digital data signals, or may also defined to carry a power signal (commonly DC voltages), either in separated and dedicated cables and connectors, or may carry the power and digital data together over the same cable. A bus may support master / slave configuration. A bus may carry a separated and dedicated timing signal or may use self-clocking line-code.

A sensor unit may include one or more sensors, each providing an electrical output signal (such as voltage or current), or changing a characteristic (such as resistance or impedance) in response to a measured or detected phenomenon. The sensors may be identical, similar or different from each other, and may measure or detect the same or different phenomena. Two or more sensors may be connected in series or in parallel. In the case of a changing characteristic sensor or in the case of an active sensor, the unit may include an excitation or measuring circuits (such as a bridge) to generate the sensor electrical signal. The sensor output signal may be conditioned by a signal conditioning circuit. The signal conditioner may involve time, frequency, or magnitude related manipulations. The signal conditioner may be linear or non-linear, and may include an operation or an instrument amplifier, a multiplexer, a frequency converter, a frequency-to-voltage converter, a voltage-to-frequency converter, a current-to-voltage converter, a current loop converter, a charge converter, an attenuator, a sample-and-hold circuit, a peak-detector, a voltage or current limiter, a delay line or circuit, a level translator, a galvanic isolator, an impedance transformer, a linearization circuit, a calibrator, a passive or active (or adaptive) filter, an integrator, a deviator, an equalizer, a spectrum analyzer, a compressor or a de-compressor, a coder (or decoder), a modulator (or demodulator), a pattern recognizer, a smoother, a noise remover, an average or RMS circuit, or any combination thereof. In the case of analog sensor, an analog to digital (A/D) converter may be used to convert the conditioned sensor output signal to a digital sensor data. The unit may include a computer for controlling and managing the unit operation, processing the digital sensor data and

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handling the unit communication. The unit may include a modem or transceiver coupled to a network port (such as a connector or antenna), for interfacing and communicating over a network.

The sensor may be a CCD or CMOS based image sensor, for capturing still or video images. The image capturing hardware integrated with the unit may contain a photographic lens (through a lens opening) focusing the required image onto an image sensor. The image may be converted into a digital format by an image sensor AFE (Analog Front End) and an image processor. An image or video compressor for compression of the image information may be used for reducing the memory size and reducing the data rate required for the transmission over the communication medium. Similarly, the sensor may be a voice sensor such as a microphone, and may similarly include a voice processor or a voice compressor (or both). The image or voice compression may be standard or proprietary, may be based on intraframe or interframe compression, and may be lossy or non-lossy compression.

An actuator unit may include one or more actuators, each affecting or generating a physical phenomenon in response to an electrical command, which can be an electrical signal (such as voltage or current), or by changing a characteristic (such as resistance or impedance) of a device. The actuators may be identical, similar or different from each other, and may affect or generate the same or different phenomena. Two or more actuators may be connected in series or in parallel. The actuator command signal may be conditioned by a signal conditioning circuit. The signal conditioner may involve time, frequency, or magnitude related manipulations. The signal conditioner may be linear or non-linear, and may include an amplifier, a voltage or current limiter, an attenuator, a delay line or circuit, a level translator, a galvanic isolator, an impedance transformer, a linearization circuit, a calibrator, a passive or active (or adaptive) filter, an integrator, a deviator, an equalizer, a spectrum analyzer, a compressor or a de-compressor, a coder (or decoder), a modulator (or demodulator), a pattern recognizer, a smoother, a noise remover, an average or RMS circuit, or any combination thereof. In the case of analog actuator, a digital to analog (D/A) converter may be used to convert the digital command data to analog signals for controlling the actuators. The unit may include a computer for controlling and managing the unit operation, processing the actuators commands and handling the unit communication. The unit may include a modem or transceiver coupled to a communication port (such as a connector or antenna), for interfacing and communicating over a network.

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A sensor / actuator unit is a device integrating a part or whole of a sensor unit with part or whole of an actuator unit. For a non-limiting example, such hardware integration may relate to housing in the same enclosure, sharing the same connector (power, communication or any other connector), sharing the same power source or power supply, sharing PCB or other mechanical support, sharing the same processor or computer, sharing the same modem or transceiver, or sharing the same communication port. A sensor actuator unit may include one or more sensors, each with its associated signal conditioner and A/D (if required), and one or more actuators, each with its associated signal conditioner and D/A, if required. A sensor unit, an actuator unit, and a sensor / actuator unit are collectively referred to as 'field units'.

A field unit may be powered in part or in whole from AC or DC power source. A local powering scheme may be used, where the power source may be integrated with field unit, such as within the same enclosure, or a remote powering scheme may be used, where the power source may be external to the field unit enclosure, and connected via a power connector in the field unit. The power source may power feed a power supply, which supplies the DC (and/or AC) voltages required by the field units sensors. A sensor may be power fed from the same power source or power supply powering the field unit circuits, or may use a dedicated power source or power supply, which may be internal or external to the field unit enclosure. An actuator may be power fed from the same power source or power supply powering the field unit circuits, or may use a dedicated power source or power supply, which may be internal or external to the field unit enclosure. The same element may serve as both a power source and as a sensor, such as solar cell, a Peltier-effect based device, and motion-based generators.

The power source may be a primary or rechargeable battery, and the field unit may include a battery compartment for holding the battery, and a connector for connecting to a battery charger. Alternatively or in addition, the power source may be based internal electrical power generator, such as a solar or photovoltaic cell, or may use an electromechanical generator (e.g., a dynamo or an alternator) harvesting kinetic energy, such as from the field unit motion. The power source may be the mains AC power, and the power supply may include AC/DC converter. The same element may double as a sensor and as a power source. For example, a solar or photovoltaic cell may be used as a light sensor, simultaneously with serving as a power source, and an electromechanical generator, for example based on harvesting mechanical vibrations energy, may at the same time be used to measure the mechanical vibrations (e.g., frequency or magnitude).

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A field unit may be remotely powered, in part or in whole, from a power source via a cable simultaneously carrying another signal. For example, the same cable may carry digital data used for communication (e.g., with a router, a gateway, or another field unit), and the same connector may be used for digital data communication and for receiving power from a power source. The powering via a connection (such as a connector) may use a dedicated cable, where the cable may have power-dedicated wires or conductors, or by using power and data carried over the same wires such as by using FDM or phantom scheme. In the case of using FDM, the field unit may include circuits for splitting the power signal and the data signal, and may include filters, transformers or a center-tap transformer. A field unit (or any part thereof) may be used to supply power from a power source to a device connected to it, such as a sensor, an actuator, a router, a gateway or another field unit. Such powering may be via a connection that use a dedicated cable, or by using the same cable and having power-dedicated wires or conductors, or by using power and data carried over the same wires such as by using FDM or phantom scheme. A powering scheme may be based on the PoE standard.

A field unit (sensor, actuator, or sensor / actuator unit) may be integrated, partially or in whole, with the router or gateway. A router, a gateway, a sensor, an actuator, or a field unit may be integrated, in whole or in part, in an electrically powered home, commercial, or industrial appliance. The home appliance may be major or small appliance, and its main function may be food storage or preparation, cleaning (such as clothes cleaning), or temperature control (environmental, food or water) such as heating or cooling. Examples of appliances are water heaters, HVAC systems, air conditioner, heaters, washing machines, clothes dryers, vacuum cleaner, microwave oven, electric mixers, stoves, ovens, refrigerators, freezers, food processors, dishwashers, food blenders, beverage makers such as coffeemakers and iced-tea makers, answering machines, telephone sets, home cinema systems, HiFi systems, CD and DVD players, induction cookers, electric furnaces, trash compactors, and dehumidifiers. The field unit may consist of, or be integrated with, a battery-operated portable electronic device such as a notebook / laptop computer, a media player (e.g., MP3 based or video player), a cellular phone, a Personal Digital Assistant (PDA), an image processing device (e.g., a digital camera or a video recorder), and / or any other handheld computing devices, or a combination of any of these devices. Alternatively or in addition, a router, a gateway, a sensor, an actuator, or a field unit may be integrated, in whole or in part, in furniture or clothes.

In one example, a sensor, an actuator, one or more field units, or the router may be integrated with, or may be part of, an outlet or a plug-in module. The outlet may be telephone, LAN

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(such as Structured Wiring based on Category 5, 6 or 7 wiring), AC power or CATV outlet. The field unit or the router may communicate over the in-wall wiring connected to the outlet, such as telephone, AC power, LAN or CATV wiring. The outlet associated sensor, actuator, one or more field units, or router may be powered from a power signal carried over the in-wall wiring, and may communicate using the in-wall wiring as a network medium.

The router (or gateway) may include a communication port and a modem (or transceiver) for connecting to the control server via the Internet. The router may include one or more communication ports, each associated with a modem (or transceiver), for communicating with field units in the building (or vehicle). A routing core may be connected to all modems (or transceivers) for routing the digital data therebetween.

In one aspect, a control server may be used as part of system implementing a control loop. The system may include one or multiple field units in a building or in a vehicle. One or more networks in the building (or vehicle) may be used for the communication between two or more field units, and for allowing the field units to communicate with a router (which may include some, or whole of, gateway functionalities) in the building (or vehicle). Each of the networks may be a wireless or wired network, and may be a control network, a home network, a PAN, a WPAN, a LAN, a WLAN, or a WAN. The router (or gateway) may communicate with a data units (such as PC) over a network in the building (or vehicle). The router (or the gateway) may serve as an intermediary device in a control loop, and may communicate with the control server over the Internet via an ISP using a network which may be wireless or wired network, which may be a PAN, a WPAN, a LAN, a WLAN, a WAN, or a cellular network.

The system may implement a control loop, which may be arranged to control one or more physical phenomena, such as regulating the phenomena to or at a setpoint (target value) or any other reference value. One or more field units may transmit sensor (or sensors) data to a controller via one or more networks. The controller functionality may receive the sensors data, may condition or process the received sensors data, and according to a control logic determines the actuator (or actuators) commands. The actuators commands may be sent via one or more networks to the target actuators in the field units. The setpoint may be fixed, set by a user, or may be time dependent. The setpoint may be dependent upon an additional sensor that is responsive to another phenomenon distinct from the controlled phenomenon, and the additional sensor is part of, or is coupled to, the system.

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