COMPLAINT FOR DECLARATORY JUDGMEN

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Plaintiff Universal Electronics Inc., by its undersigned counsel, and for its Complaint against Defendant Europe S.A., hereby alleges as follows:

SUMMARY OF NATURE OF ACTION

1. This claim arises under the Declaratory Judgment Act, 28 U.S.C. §§2201 and 2202, and the patent laws of the United States, Title 35 of the United States Code.

THE PARTIES

- 2. Plaintiff Universal Electronics Inc. ("UEI") is a Delaware corporation with its principal place of business located at 6101 Gateway Drive, Cypress, California 90630.
- 3. Defendant Logitech Europe S.A., ("Defendant" or "Logitech") a subsidiary of Logitech International S.A., is a Swiss corporation with its principal place of business in Switzerland. Logitech, Inc., a wholly owned subsidiary of Logitech International S.A., is a California corporation with its principal place of business located at 6505 Kaiser Drive, Fremont, California 94555. Defendant transacts substantial business, both directly and through its agents, on an ongoing basis in this judicial district and elsewhere in the United States, including attempting to enforce United States Patent No. 6,784,805 in an action pending in this District, styled, *Universal Electronics Inc. v. Logitech, Inc. et al.*, Case No. SACV 11-1056-JVS (ANx).
- 4. Unless specifically stated otherwise, the acts complained of herein were committed by, on behalf of, and/or for the benefit of Defendant.

JURISDICTION AND VENUE

- 5. Plaintiff UEI seeks declaratory judgment of unenforceability of U.S. Patent No. 6,784,805 ("the '805 patent"). Accordingly, this Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331, 1338(a), 2201, and 2202, as well as the Patent Act, 35 U.S.C. § 1, et seq.
- 6. This Court has personal jurisdiction over Defendant Logitech by virtue of its doing business in and directed at the State of California pertaining to the '805 patent. Logitech conducted business relating to the '805 patent in the State of California,

including attempting to enforce the '805 patent in an action pending in this District, styled, *Universal Electronics Inc. v. Logitech, Inc. et al.*, Case No. SACV 11-1056-JVS (ANx).

- 7. On July 15, 2011, UEI filed a lawsuit against Defendant along with certain related entities in the Central District of California asserting infringement of 17 patents owned by UEI. The case is currently pending in the Central District of California styled, *Universal Electronics Inc. v. Logitech, Inc. et al.*, Case No. SACV 11-1056-JVS (ANx).
- 8. On November 3, 2011, Defendant responded to UEI's complaint by counterclaiming that UEI infringed five patents purportedly owned by Defendant, including the '805 patent. Defendant alleged that several of UEI's products infringe the '805 literally or under the Doctrine of Equivalents. Defendant also accused UEI of indirect infringement, and of willful infringement.
- 9. Thus an actual and ripe controversy exists of sufficient immediacy to warrant declaratory relief. UEI is therefore entitled to a finding that the '805 patent is invalid and unenforceable due to inequitable conduct during the prosecution of the '805 patent.
 - 10. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391 and 1400(b).

FACTUAL BACKGROUND

- 11. UEI has been an industry leader in the design, development, and manufacture of remote control technology for over twenty years.
- 12. UEI has a staff of scientists and engineers who design and develop innovative ideas in the remote control field. UEI has invested millions of dollars developing such ideas and has filed a substantial number of patent applications for its inventions every year.
- 13. Logitech purports to be the owner by assignment of U.S. Patent No. 6,784,805, entitled "State-Based Remote Control System." The '805 patent issued on August 31, 2004. A true and correct copy of the '805 patent is attached as **Exhibit 1**.

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COUNT I

DECLARATORY JUDGMENT OF UNENFORCEABILITY OF U.S. PATENT

NO. 6,784,805

- 14. Plaintiff UEI incorporates and realleges the allegations set forth in Counterclaim Paragraphs 1-13, above, as if set forth fully herein.
- 15. During prosecution of the '805 patent, Logitech, the prior owners of the '805 patent, their counsel, and anyone else responsible for prosecuting the '805 patent knew or should have known that all patent applicants and their counsel are under a duty to act with good faith and candor before the United States Patent & Trademark Office ("PTO") and are required by 37 C.F.R. § 1.56 to disclose material information to the PTO.
- 16. In connection with the application for the '805 patent, all of the inventors of the '805 patent signed a declaration in which they attested to their awareness of their duty of good faith and candor before the PTO and the requirement of 37 C.F.R. § 1.56 to disclose material information to the PTO.
- 17. The attorneys and agents who prosecuted the '805 patent on behalf of Logitech, including but not limited to Michael Neustel ("Neustel") of the Neustel Law Offices, Ltd. and Rodney C. LeRoy ("LeRoy") of the Kilpatrick Townsend & Stockton LLP law firm (fka Townsend and Townsend and Crew LLP) ("KTS"), were registered patent attorneys who knew or should have known of their duty of good faith and candor before the PTO and the requirement of 37 C.F.R. § 1.56 to disclose material information to the PTO.
- 18. On March 12, 2001, the prior owners of application no. 12/245,675 (eventually issued as the '805 patent) and Neustel filed application no. 12/245,675 with the PTO.
- 19. On September 25, 2003, the examiner rejected all 16 original claims of application no. 12/245,675 as indefinite under 35 U.S.C. § 112, ¶ 2. The examiner also

rejected all of the claims as anticipated and/or obvious under 35 U.S.C. §§ 102 and 103 in view of U.S. Patent No. 5,109,222 ("Welty"). In addition, the examiner objected to all of the original independent claims because it was unclear how the current state is determined.

- 20. On December 4, 2003, the prior owners and Neustel filed a response and amendment, amending the original 16 claims and adding new claims 17-35. The claims included in the December 4, 2003 response are the only amended and new claims that appear in the file history of the '805 patent.
- 21. On January 3, 2004, the examiner issued a final office action, rejecting all pending claims 1-35 as obvious under 35 U.S.C. §103 in view of Welty and U.S. Patent No. 6,538,586 ("Kawajiri").
- 22. On February 22, 2004, the prior owners and Neustel submitted an examiner interview request with a proposed issue agenda in response to the examiner's final rejection.
- 23. On February 26, 2004, Neustel, William Bangachon and Michael Horabik conducted a personal examiner interview. The examiner interview summary, signed by the examiner, states "[a]pplicant suggests to amend the claims to clearly point out the calculating and updating feature of the remote controller which will distinguish it from the remote controller of Kawajiri. It is agreed that there is a difference between the remote controller of the instant invention and Kawajiri." No amended claims were attached to the examiner interview summary.
- 24. On March 26, 2004, the prior owners and Neustel submitted a request for continued examination to file an information disclosure statement listing additional prior art. The prior owners and Neustel clearly noted that the request for continued examination was not filed to submit amended claims and no amended claims were filed. A request for continued examination would have been necessary to submit amended claims because the pending office action was a final office action.

- 25. On April 15, 2004, the examiner issued a notice of allowability with respect to pending claims 1-35 and entered the previously-filed information disclosure statement. In the examiner's statement of reasons for allowance, examiner stated: "The prior art made of record (Welty (US 5,109,222) in view of Kawajiri (US 6,538,556)) does not teach 'a state-based remote control system comprising an electronic system capable of storing, calculating and updating a simulated current state data relating to at least one external device wherein said simulated current state data is calculated based upon at least one electronic device', as claimed in claims 1, 17, and 20 (see interview summary mailed 2/26/04). Claims 8, 11, 23, 26, and 32 recites [sic] a method of practicing the system of claims 1, 17, and 20, and therefore allowable for the same reasons. Claims 2-7, 9-10, 12-16, 18-19, 21-22, 24-25, 27-31, and 33-35 are dependent claims and therefore allowable for the same reasons."
- 26. The prior owners, Neustel, Logitech, LeRoy, and KTS never submitted comments regarding the examiner's notice of allowability, and, on May 3, 2004, the prior owners and Neustel paid the issue fee for the application for the '805 patent. On information and belief, the application for the '805 patent was assigned by the prior owners to Logitech on May 4, 2004. With the issue fee, Neustel also submitted an information disclosure statement listing four additional prior references, but the examiner refused to consider those references. The '805 patent was issued on August 31, 2004.
- 27. On July 27, 2005, almost a year after the '805 patent was issued, Logitech, LeRoy and KTS submitted a request for a certificate of correction to the Certificate of Corrections Branch of the PTO. Logitech, LeRoy and KTS stated "Pursuant to 37 CFR § 1.322 Applicants submit a Request for Certificate of Correction to *correct an inadvertent clerical error* of the Patent Office that appear on U.S. Patent No. 6,784,805 B2 as originally issued. Specifically, the claims amended in the Amendments dated April 23, 2004 and February 26, 2004 were incorrectly printed on the issued patent. The desired

correction is set forth on form PTO/SB/44, enclosed." (emphasis added) The request was signed by LeRoy.

- 28. The request was approved on March 1, 2006, and the new claims 1-35 (with certain claims cancelled) were entered on September 19, 2006.
- 29. Logitech, LeRoy and KTS never initiated reissue proceedings after the '805 patent was issued.
- 30. No amendment claims were ever entered in the record on the dates referenced in Logitech's, LeRoy's, and KTS's request for a certificate of correction.
- 31. Claims 1-35 that were attached to Logitech's, LeRoy's and/or KTS's request for a certificate of correction were materially and substantially different from the only set of claims 1-35 in the file history (the amended and new claims submitted in the December 4, 2003 amendment and response). Moreover, claims 1-35 that were submitted by Logitech, LeRoy and KTS were materially and substantially different from the claims allowed by the examiner in his April 15, 2004, notice of allowability.
- 32. Thus, Logitech, LeRoy and KTS falsely claimed that the claims it submitted with the certificate of correction request were previously entered into the record and allowed by the examiner when they were not.
- 33. With respect to the independent claims 1, 8, 11, 17, 20, 23, 26 and 32 that were submitted by Logitech, LeRoy and KTS as part of the request for a certificate of correction, Logitech, LeRoy and KTS made certain material and substantial modifications to the claims that were never present in any of the prior claims in the file history and thus, the claims that were allowed by the examiner. For example, Logitech, LeRoy and KTS changed independent apparatus claim 1 as follows. First, Logitech, LeRoy and/or KTS changed claim 1 from "a state-based remote control system, comprising...an electronic system" to "a state-based remote, comprising a remote control." Second, Logitech, LeRoy and/or KTS changed the independent apparatus claims from "a communication device connected to said electronic system for emitting a

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- 34. For example, Logitech, LeRoy and/or KTS changed independent method claim 8 as follows. First, Logitech, LeRoy and/or KTS changed claim 8 from "a method of operating a stated-based remote control system having an electronic system" to "a method of operating a state-based remote control having an electronic circuit." Second, Logitech, LeRoy and/or KTS changed claim 8 from "modifying said simulated current state data to reflect a new state of said at least one external electronic device based upon said action request" to "modifying said simulated current state data to reflect a new state of said at least one external electronic device based upon said action request or said task request prior to a next action request or a task request." (All emphases added).
- 35. Logitech, LeRoy and KTS made similar material changes to the other claims and also cancelled certain claims that had not been cancelled previously.
- 36. The material and substantial changes made to the new claims submitted as part of the request for a certificate of correction are further confirmed by the examiner's statement of reasons for allowance: "The prior art ... does not teach 'a state-based remote control system comprising an electronic system capable of storing, calculating and updating a simulated current state data relating to at least one external device

wherein said simulated current state data is calculated based upon at least one electronic device."

- 37. Logitech has admitted that both of the amendments referenced in the certificate of correction are not in the publicly-available file history for the '805 patent and the file history produced by Logitech.
- 38. The purported February 26, 2004 amendment is not in the publicly available file history for the '805 patent because Patentee never filed an RCE after a final office action for that amendment and, therefore, the examiner never entered the amendment. Logitech admits that in the February 26, 2004 amendment, the term "electronic system" was changed to "remote control." Further, Patentee cancelled claims 12 and 27. Yet, when the examiner issued his notice of allowance, he stated that all 35 claims were allowed and recited that the allowed claims disclosed "a state-based remote control system comprising an *electronic system*..." If Patentee's February 26, 2004 amendment was entered by the examiner, the examiner would have taken into account Patentee's cancellation of two claims and noted that 33 claims were allowed as opposed to 35 claims. Moreover, if the amendment was entered, the examiner's recitation to the allowed claims would have reflected Patentee's change from "electronic system" to "remote control." The notice of allowance does not include those changes because the February 26, 2004 amendment was never entered by the examiner.
- 39. The purported April 23, 2004 amendment after allowance is not in the publicly available file history for the '805 patent because Patentee never filed a request for an amendment after allowance under 37 C.F.R. § 1.312 and, therefore, the examiner never allowed or entered the amendment. Logitech has admitted that Patentee made material changes to the claims and does not dispute that the examiner never allowed the April 23, 2004 amendment (which could not have been entered as a matter of right). \(^1\)

¹See 37 C.F.R. § 1.312 ("No amendment may be made as a matter of right in an application after the mailing of the notice of allowance. Any amendment filed pursuant to this section must be filed before or with the payment of the issue fee, and may be entered

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Logitech cannot point to an examiner allowance because the April 23, 2004 amendment was never allowed or entered by the examiner.

- 40. LeRoy and KTS were registered patent attorneys and agents who, based on a review of the prosecution history, would and should have known that the February 26, 2004 and April 23, 2004 amendments were never entered or allowed by the examiner.
- With a specific intent to deceive the PTO, Logitech, LeRoy and KTS filed a 41. materially false request for a certificate of correction in order to bypass the PTO's review of material and substantial amendments that were never previously entered and allowed by the examiner.
- 42. With a specific intent to deceive the PTO, Logitech, LeRoy and KTS concealed and failed to disclose that claim amendments were not submitted and were never entered or allowed by the examiner on February 26, 2004 and April 23, 2004.
- 43. With a specific intent to deceive the PTO, Logitech, LeRoy and KTS falsely stated that the request for a certificate of correction was being made "to correct an inadvertent clerical error of the Patent Office that appear on U.S. Patent No. 6,784,805 B2 as originally issued."
- 44. With a specific intent to deceive the PTO, Logitech, LeRoy and KTS falsely stated that "the claims amended in the Amendments dated April 23, 2004 and February 26, 2004 were incorrectly printed on the issued patent."
- 45. With a specific intent to deceive the PTO, Logitech, LeRoy and KTS also made intentional and material misrepresentations or omissions regarding claim amendments purportedly submitted on April 23, 2004 and February 26, 2004 that did not exist, were never entered and/or allowed by the examiner, and a purported clerical error of the PTO.

on the recommendation of the primary examiner, approved by the Director, without withdrawing the application from issue.").

- 46. With a specific intent to deceive the PTO, Logitech, LeRoy and KTS also made intentional and material misrepresentations or omissions and falsely stated and/or implied that the claims submitted as part of the request for a certificate of correction were the claims allowed by the examiner.
- 47. The request for certificate of correction filed by Logitech, LeRoy and KTS, and signed by LeRoy was an unmistakably false certification.
- 48. In order to bypass the examiner's review of the material amendments made to the claims through a reissue proceeding, Logitech's, LeRoy's and KTS's false certification deceived the PTO in to believing that Logitech, LeRoy and KTS were simply asking the PTO to correct clerical errors when in fact Logitech, LeRoy and KTS were making substantial and material amendments to the claims--substantial and material amendments that had never been entered or allowed by the examiner.
- 49. An intentional concealment of prior art that is material to the patentability of the inventions claimed in a patent, an affirmative misrepresentation of a material fact, and/or the submission of false material information with an intent to deceive the PTO constitutes inequitable conduct before the PTO and renders the patent unenforceable. Misconduct is material when a patentee engages in affirmative acts of egregious misconduct, such as the filing of an unmistakably false affidavit.
- 50. Logitech, LeRoy and KTS engaged in affirmative acts of egregious misconduct by filing an unmistakably false affidavit to the PTO.
- 51. The PTO would not have issued the materially amended claims but for the Logitech's, LeRoy's and/or KTS's false statements and intentional and material misrepresentations or omissions contained in their request for a certificate of correction.
- 52. If Logitech, LeRoy and KTS had not submitted its false Correction Request, the claims that were issued in the certificate of correction would never have been issued by the Certificate of Corrections Branch of the PTO because the examiner never entered or allowed those purported amendments.

2 and against Logitech Europe S.A. as follows: 3 4 a. inequitable conduct; 5 b. 6 under 35 U.S.C. § 285; 8 9 c. d. 10 and proper. 11 **JURY DEMAND** 12 13 Dated: April 17, 2012 14 15 16 17 18 Santa Monica, CA 90404 19 20 21 22 23 24 25 26 27

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UEI'S PRAYER FOR RELIEF WHEREFORE, Plaintiff UEI respectfully requests entry of judgment in its favor Declaring that U.S. Patent No. 6,784,805 is unenforceable based on Declaring that UEI is a prevailing party and that this is an exceptional case, and awarding UEI its costs, expenses, disbursements, and reasonable attorney's fees Ordering Logitech to pay all costs associated with this action; and Awarding such other costs and further relief as the Court may deem just UEI requests a trial by jury on all issues so triable. Respectfully submitted, Wendy M/Mantell GREENBERG TRAURIG I 2450 Colorado Avenue Suite 400 East

> Telephone: 310-586-7700 Facsimile: 310-586-7800 James J. Lukas, Jr.

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Attorneys for Plaintiff, Universal Electronics Inc.

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EXHIBIT 1

(12) United States Patent

(10) Patent No.: US 6,784,805 B2

(45) Date of Patent: A

Aug. 31, 2004

(54) STATE-BASED REMOTE CONTROL SYSTEM

(75) Inventors: Glen McLean Harris, Mississauga

(CA); Justin M. Henry, Mississauga

(CA)

(73) Assignee: Intrigue Technologies Inc.,

Mississauga (CA)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 501 days.

(21) Appl. No.: 09/804,718

(22) Filed: Mar. 12, 2001

(65) Prior Publication Data

US 2001/0045819 A1 Nov. 29, 2001

Related U.S. Application Data

(60) Provisional application No. 60/253,727, filed on Nov. 29, 2000, and provisional application No. 60/189,487, filed on Mar. 15, 2000.

(51)	Int. Cl. ⁷	 G08C 19/00;	G05B 23/02
(50)	TTO OIL	240/02= 70	0.10/005 50

(52) U.S. Cl. 340/825.69; 340/825.72;

340/3.2

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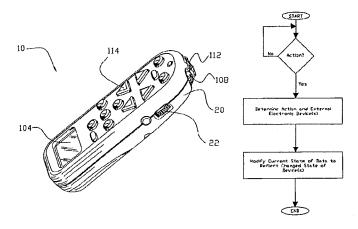
* cited by examiner

Primary Examiner—Michael Horabik Assistant Examiner—William Bangachon (74) Attorney, Agent, or Firm—Michael S. Neustel

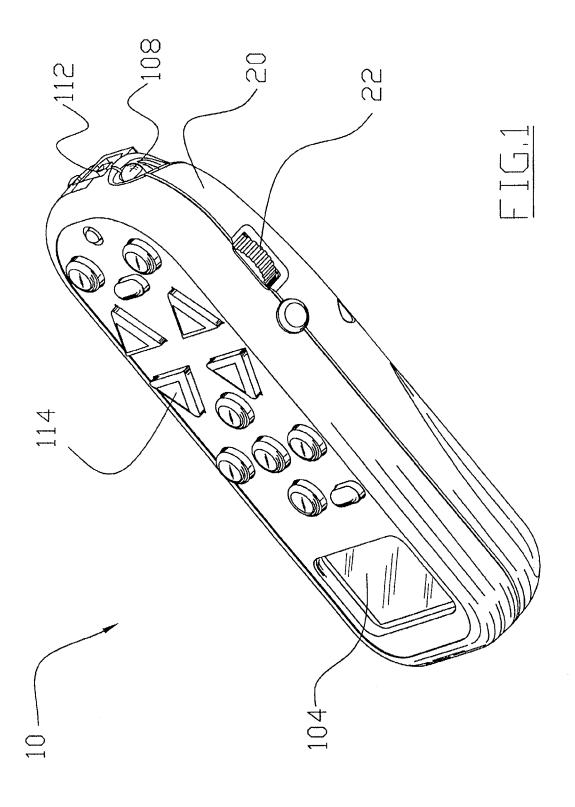
57) ABSTRACT

A state-based remote control system for providing efficient and simple operation of a plurality of electronic devices as a coordinated system based upon an overall task. The state-based remote control system includes a housing, a keypad in communication with an electronic system contained within the housing, and a communication device in communication with the electronic system for communicating with external electronic devices. The electronic system monitors the buttons selected by a user to determine the state of all external electronic devices that are to be controlled. When the user selects a task (e.g. watch television), the electronic system automatically determines the actions required to achieve the desired task based upon the current state of the external electronic devices. After the task has been fulfilled, the electronic system updates the data to reflect the modified state of the external electronic devices.

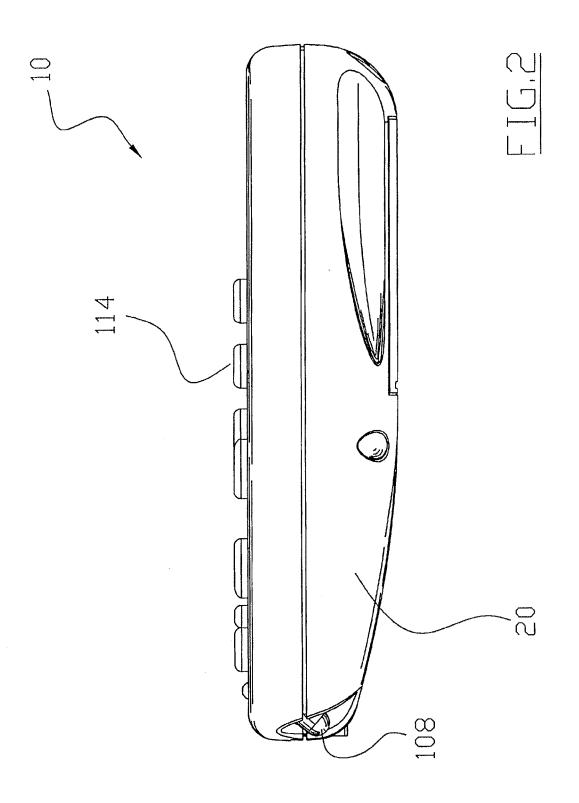
35 Claims, 12 Drawing Sheets



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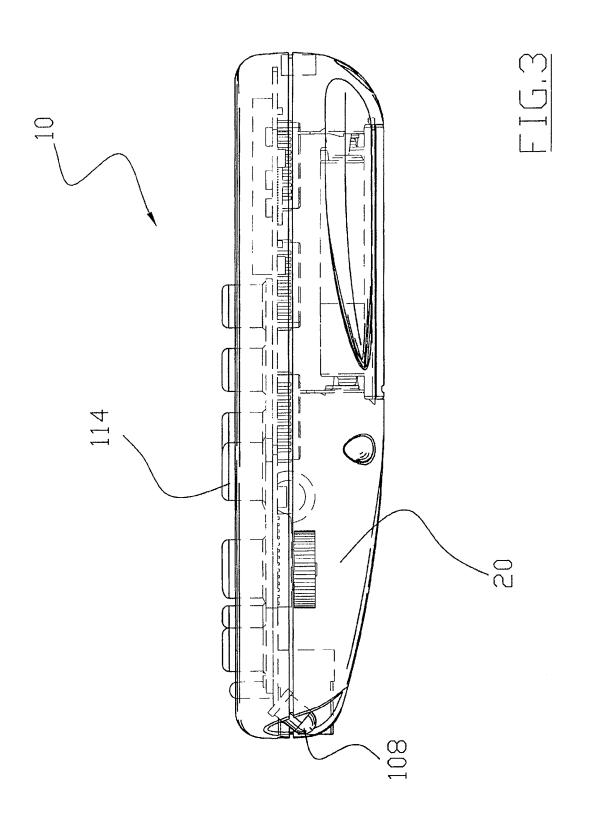


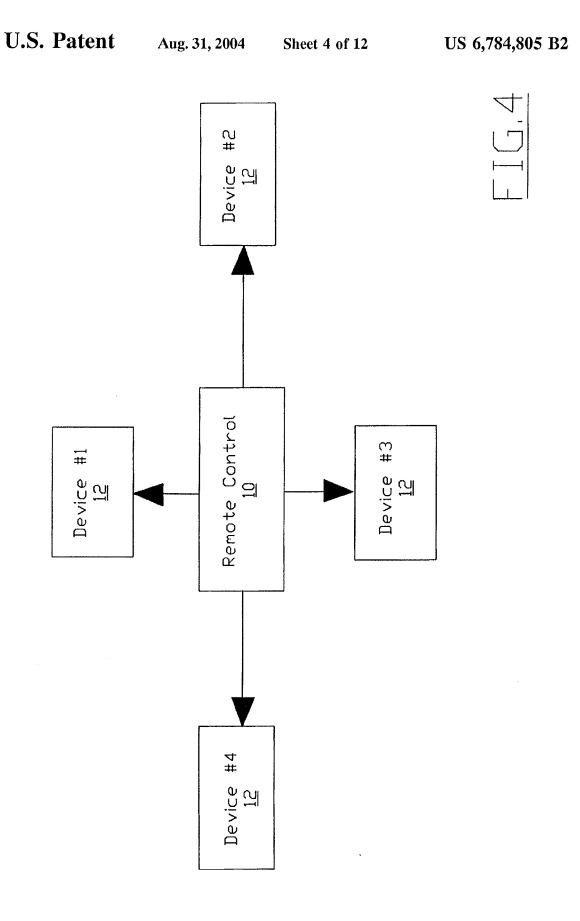
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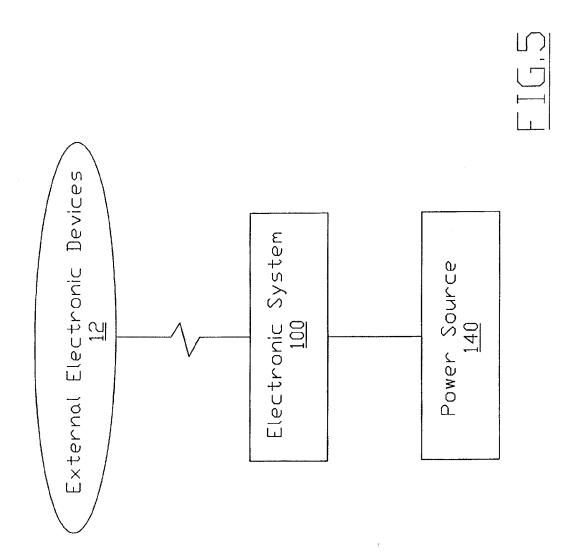
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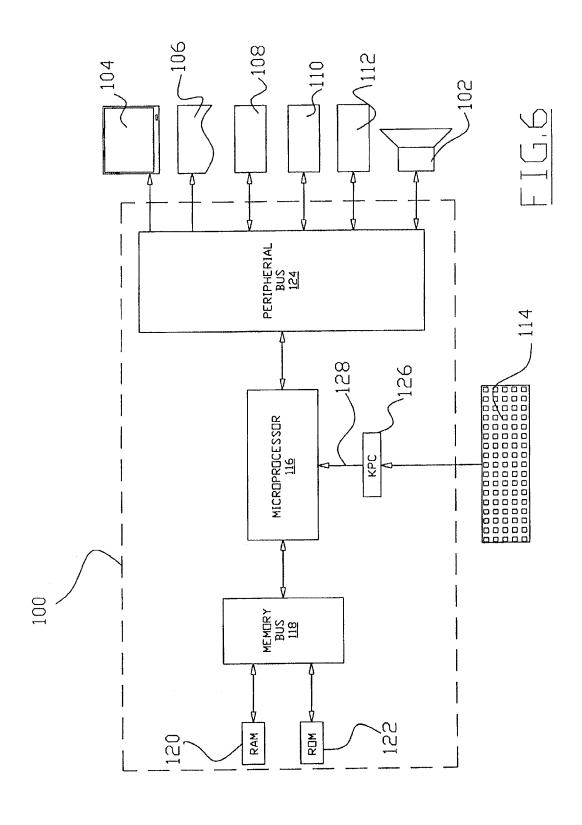
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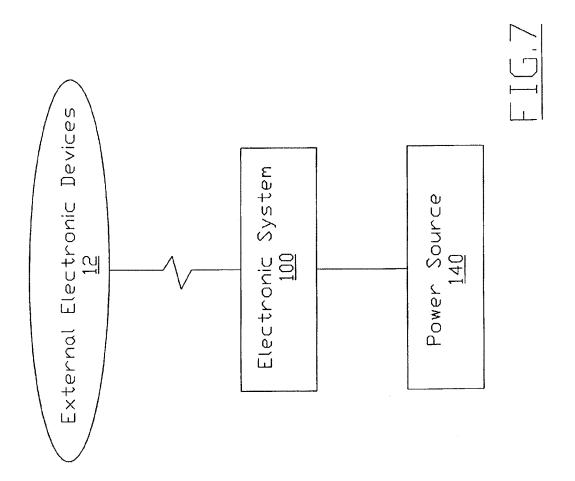


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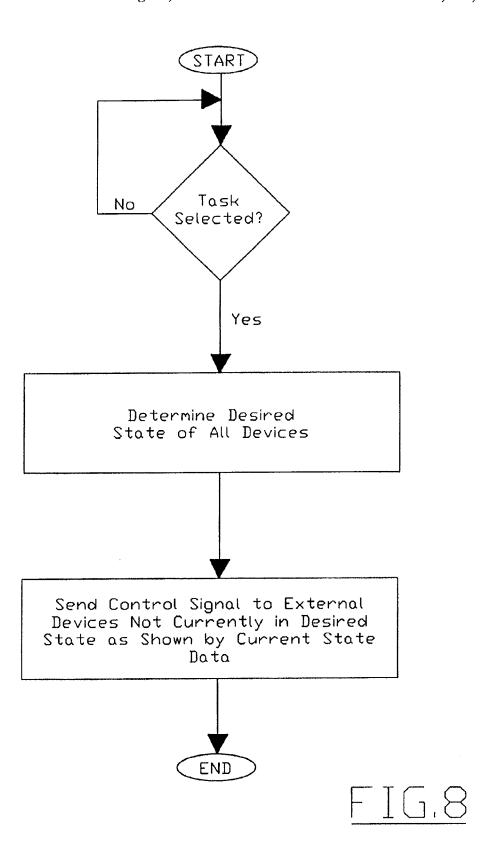


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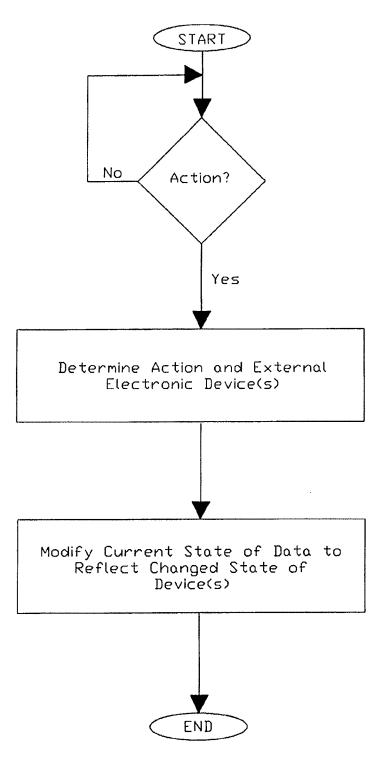
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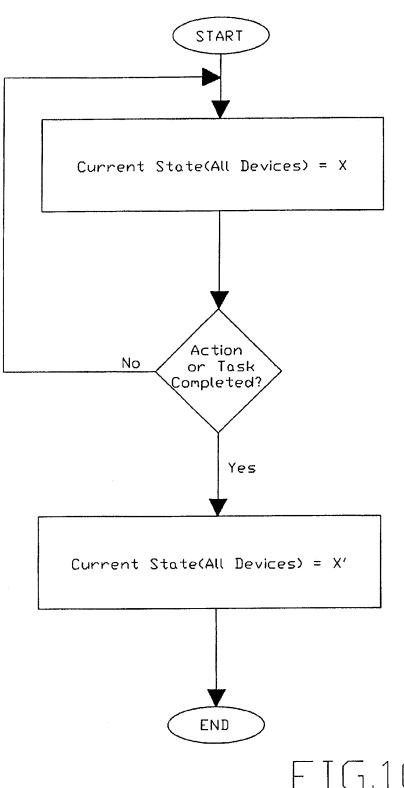
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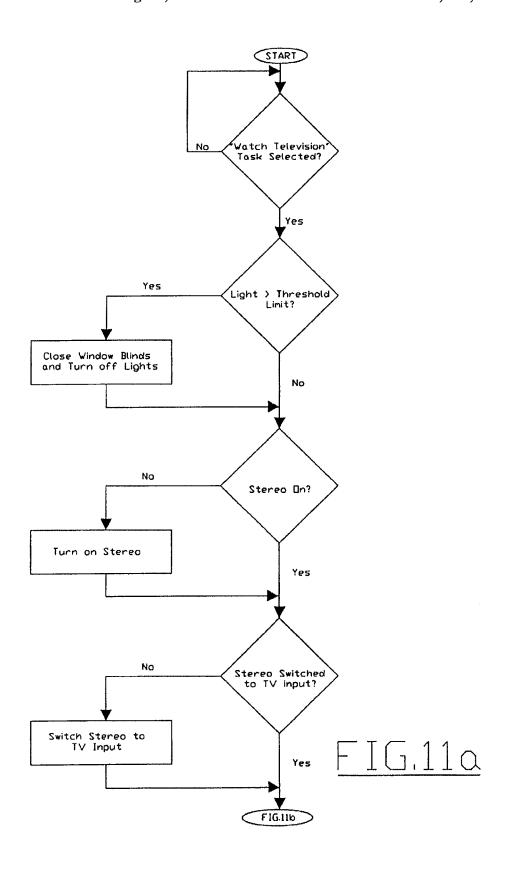
<u>FIG.9</u>

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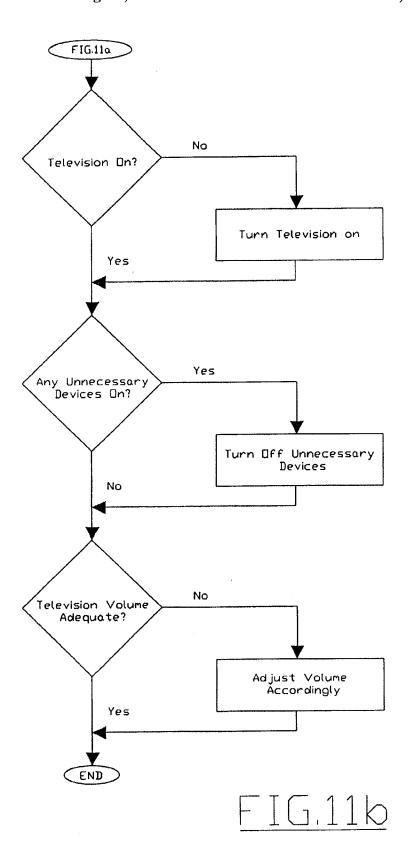
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STATE-BASED REMOTE CONTROL SYSTEM

CROSS-REFERENCE TO RELATED U.S. PROVISIONAL PATENT APPLICATIONS

I hereby claim benefit under Title 35, United States Code, Section 119(e) of U.S. provisional patent application Serial No. 60/189,487 filed Mar. 15, 2000, and U.S. provisional patent application Serial No. 60/253,727 filed Nov. 29, 2000. This application is a continuation of the 60/189,487 and 60/253,727 applications. The 60/189,487 and 60/253,727 applications are currently pending. The 60/189,487 and 60/253,727 applications are hereby incorporated by reference into this patent application.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates generally to remote control devices and more specifically it relates to a state-based 20 remote control system for providing efficient and simple operation of a plurality of electronic devices as a coordinated system based upon an overall task.

2. Description of the Prior Art

Remote control devices have been in use for years. Remote control devices are utilized to operate various external electronic devices including but not limited to televisions, stereos, receivers, VCRs, DVD players, CD players, amplifiers, equalizers, tape players, cable units, 30 lighting, window shades and other electronic devices. A conventional remote control is typically comprised of a housing structure, a keypad within the housing structure for entering commands by the user, electronic circuitry within the housing structure connected to the keypad, and a transmitter electrically connected to the electronic circuitry for transmitting a control signal to an electronic device to be operated.

The user depresses one or more buttons upon the keypad when a desired operation of a specific electronic device is 40 desired. For example, if the user desires to turn the power off to a VCR, the user will depress the power button upon the remote control which transmits a "power off" control signal that is detected by the VCR resulting in the VCR turning off.

Because of the multiple electronic devices currently avail- 45 able within many homes and businesses today, a relatively new type of remote control is utilized to allow for the control of a plurality of electronic devices commonly referred to as a "universal remote control." Most universal remote controls have "selector buttons" that are associated with the specific $_{50}$ electronic device to be controlled by the remote control (i.e. television, VCR, DVD player, etc.).

A few universal remote controls allow for "macros" to be programmed into the remote control so that when a preprogrammed button is depressed a string of commands is 55 be described subsequently in greater detail, is to provide a executed as programmed. For example, if the user desires to operate their television along with the stereo receiving input from the television, the user would program a macro for turning on the television, turning on the stereo and then switching the input to the stereo for receiving audio input 60 from the television. The main problem with conventional universal remote controls is that they are unable to detect or monitor the state of a particular electronic device. Another problem with conventional universal remote controls is that when a preprogrammed macro is executed, an undesirable 65 effect can occur wherein electronic devices that are desired to be turned on are actually turned off. For example, if the

television is already on but the stereo is tuned to a local radio station and the user selects the above macro the power to the television would actually be turned off instead of maintained

Recently, universal remote controls have been developed that communicate via radio frequency (RF) with external sensing devices that are connected to the electronic devices for detecting the current state of the electronic device. Other remote controls are able to receive and display information from the electronic device they control such as displaying the name of a radio station on a display of the remote. These devices are relatively expensive and again difficult to utilize for the average consumer.

The main problem with conventional remote control 15 devices is that they are typically unable to know the particular "state" of an electronic device they are to control, particularly universal remote controls. A further problem with conventional remote controls that do allow for advanced configuration thereof to compensate for the various states of the electronic device is that they are often times difficult for the average consumer to utilize. Another problem with conventional remote control devices is that they force consumers to view their electronic devices "individually" (i.e. turn television on, turn stereo on, switch audio input on stereo to television) rather than in broad "tasks" (e.g. watch television).

While these devices may be suitable for the particular purpose to which they address, they are not as suitable for providing efficient and simple operation of a plurality of electronic devices as a coordinated system based upon an overall task. Conventional remote controls are typically programmed to operate only one electronic device. Conventional universal remote controls are typically programmed to operate electronic devices "individually" or are difficult to configure to automated control of a plurality of electronic devices.

In these respects, the state-based remote control system according to the present invention substantially departs from the conventional concepts and designs of the prior art, and in so doing provides an apparatus primarily developed for the purpose of providing efficient and simple operation of a plurality of electronic devices as a coordinated system based upon an overall task.

SUMMARY OF THE INVENTION

In view of the foregoing disadvantages inherent in the known types of remote controls now present in the prior art, the present invention provides a new state-based remote control system construction wherein the same can be utilized for providing efficient and simple operation of a plurality of electronic devices as a coordinated system based upon an

The general purpose of the present invention, which will new state-based remote control system that has many of the advantages of the remote controls mentioned heretofore and many novel features that result in a new state-based remote control system which is not anticipated, rendered obvious, suggested, or even implied by any of the prior art remote controls, either alone or in any combination thereof.

To attain this, the present invention generally comprises a housing, a keypad in communication with an electronic system contained within the housing, and a communication device in communication with the electronic system for communicating with external electronic devices. The electronic system constantly monitors the buttons selected by a

user to determine the state of all external electronic devices that are to be controlled. When the user selects a task (e.g. watch television), the electronic system automatically determines the actions required to achieve the desired task based upon the current state of the external electronic devices. 5 After the task has been fulfilled, the electronic system updates the data to reflect the modified state of the external electronic devices.

There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and that will form the subject matter of the claims appended hereto.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of the description and should not be regarded as limiting.

A primary object of the present invention is to provide a state-based remote control system that will overcome the shortcomings of the prior art devices.

A second object is to provide a state-based remote control 30 system for providing efficient and simple operation of a plurality of electronic devices as a coordinated system based upon an overall task.

Another object is to provide a state-based remote control system that provides for intuitive operation of a plurality of 35 similar reference characters denote similar elements electronic devices.

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views. FIGS. 1 through 11 illustrate

An additional object is to provide a state-based remote control system that allows for the simple operation of a plurality of electronic devices based upon an overall "task" instead of specific controls for specific electronic devices. 40

A further object is to provide a state-based remote control system that is simple and easy to utilize for the average consumer.

Another object is to provide a state-based remote control system that does not require significant programming prior to usage.

An additional object is to provide a state-based remote control system that is affordable.

Other objects and advantages of the present invention will become obvious to the reader and it is intended that these objects and advantages are within the scope of the present invention.

To the accomplishment of the above and related objects, this invention may be embodied in the form illustrated in the 55 accompanying drawings, attention being called to the fact, however, that the drawings are illustrative only, and that changes may be made in the specific construction illustrated and described within the scope of the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

Various other objects, features and attendant advantages of the present invention will become fully appreciated as the same becomes better understood when considered in conjunction with the accompanying drawings, in which like 65 reference characters designate the same or similar parts throughout the several views, and wherein:

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FIG. 1 is an upper perspective view of the present invention.

FIG. 2 is a side view of the present invention.

FIG. 3 is a side view of the present invention illustrating electronic circuitry within.

FIG. 4 is a block diagram illustrating the communications between the present invention and a plurality of external electronic devices.

FIG. 5 is a block diagram illustrating the electronic system of the present invention electrically connected to the power source and in communication with the external electronic devices.

FIG. 6 is a block diagram illustrating the electronic system along with a plurality of accessory devices connected to thereof.

FIG. 7 is a flowchart illustrating the initial programming of the present invention prior to usage.

FIG. 8 is a flowchart illustrating the modification of the state of external electronic devices not in the desired state as desired within a task to be performed.

FIG. 9 is a flowchart illustrating an action performed upon one or more external devices and modifying the memory within the electronic system accordingly.

FIG. 10 is a flowchart illustrating the modification of the memory within the electronic system to reflect the changed state of the external electronic devices after a task or an action has been completed.

FIGS. 11a-b is a flowchart providing an example task for watching television being executed.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Turning now descriptively to the drawings, in which throughout the several views, FIGS. 1 through 11 illustrate a state-based remote control system 10, which comprises a housing 20, a keypad 114 in communication with an electronic system 100 contained within the housing 20, and a communication device 108 in communication with the electronic system 100 for communicating with external electronic devices 12. The electronic system 100 constantly monitors the buttons of the keypad 114 and other switches selected by a user to determine the state of all external electronic devices 12 that are to be controlled. When the user selects a task (e.g. watch television), the electronic system 100 automatically determines the actions required to achieve the desired task based upon the current state of the external electronic devices 12. After the task has been fulfilled, the electronic system 100 updates the data to reflect the modified state of the external electronic devices 12.

A. Housing Structure

The present invention generally is comprised of a housing 20 having a structure and shape similar to conventional remote control devices. The housing 20 may be constructed of various types of materials and shapes as can be appreciated by one skilled in the art. The housing is preferably structured to be ergonomic for a majority of users.

B. Electronic System

The present invention is utilized to control and operate various external electronic devices including but not limited to televisions, stereos, receivers, VCRs, DVD players, CD players, amplifiers, equalizers, tape players, cable units, satellite dish receivers, lighting, window shades and other electronic devices. Almost any number of external electronic devices may be controlled by the present invention as will be discussed in further detail.

FIG. 6 is a block diagram of an exemplary electronic system 100 for practicing the various aspects of the present invention. The electronic system 100 is preferably enclosed within the housing. A portable power source 140 is electrically connected to the electronic system 100 for providing electrical power to the electronic system 100. The power source 140 may be comprised of any power source such as a battery structure (disposable or rechargeable), solar cells, or direct power.

The electronic system 100 preferably includes a display screen 104, a network interface 112, a keypad 114, a microprocessor 116, a memory bus 118, random access memory (RAM) 120, a speaker 102, read only memory (ROM) 122, a peripheral bus 124, a keypad controller 126, and a communications device 108. As can be appreciated, the electronic system 100 of the present invention may be comprised of any combination of well-known computer devices, personal digital assistants (PDAs), laptop computers, remote control devices and other similar electronic structures.

The microprocessor 116 is a general-purpose digital processor that controls the operation of the electronic system 100. The microprocessor 116 can be a single-chip processor or implemented with multiple components. Using instructions retrieved from memory, the microprocessor 116 controls the reception and manipulations of input data and the 25 output and display of data on output devices.

The memory bus 118 is utilized by the microprocessor 116 to access RAM 120 and ROM 122. RAM 120 is used by microprocessor 116 as a general storage area and as scratch-pad memory, and can also be used to store input data and 30 processed data. ROM 122 can be used to store instructions or program code followed by microprocessor 116 as well as other data.

Peripheral bus 124 is used to access the input, output and storage devices used by the electronic system 100. In the 35 described embodiment(s), these devices include a display screen 104, an accessory device 106, a speaker 102, a communications device 108, and a network interface 112. A keypad controller 126 is used to receive input from the keypad 114 and send decoded symbols for each pressed key 40 to microprocessor 116 over bus 128.

The display screen 104 is an output device that displays images of data provided by the microprocessor 116 via the peripheral bus 124 or provided by other components in the electronic system 100. Other output devices such as a 45 printer, plotter, typesetter, etc. can be utilized as an accessory device 106.

The microprocessor 116 together with an operating system operate to execute computer code and produce and use data. The computer code and data may reside on RAM 120, 50 ROM 122, or other storage mediums. The computer code and data could also reside on a removable program medium and loaded or installed onto the electronic system 100 when needed. Removable program mediums include, for example, PC-CARD, flash memory, and floppy disk.

The network interface 112 is utilized to send and receive data over a network connected to other electronic systems. The network interface may be comprised of a Universal Serial Bus (USB), an external bus standard that supports data transfer rates of 12 Mbps (12 million bits per second). 60 A single USB port can be used to connect up to 127 peripheral devices, such as mice, modems, and keyboards. An interface card or similar device and appropriate software implemented by microprocessor 116 can be utilized to connect the electronic system 100 to an existing network and 65 transfer data according to standard protocols including data over a global computer network such as the Internet.

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The keypad 114 is used by a user to input commands and other instructions to the electronic system 100. Other types of user input devices can also be used in conjunction with the present invention. For example, pointing devices such as a computer mouse, a jog switch 22, a track ball, a stylus, or a tablet to manipulate a pointer on a screen of the electronic system 100.

The present invention can also be embodied as computer readable code on a computer readable medium. The computer readable medium is any data storage device that can store data which can be thereafter be read by a electronic system. Examples of the computer readable medium include read-only memory, random-access memory, magnetic data storage devices such as diskettes, and optical data storage devices such as CD-ROMs. The computer readable medium can also be distributed over a network coupled electronic systems so that the computer readable code is stored and executed in a distributed fashion.

The communications device 108 may be comprised of any well-known communication system that allows communications with external electronic devices. The communications device 108 may provide for various types of communication such as but not limited to via infrared (IR), wireless (e.g. BLUETOOTH), unidirectional, bi-directional, radio frequency (RF), visible light, ultrasonic and various other means for communicating with external electronic devices.

The environmental unit 110 senses environmental information such as lighting, motion, orientation, temperature, audio and other environmental information. The environmental unit 110 communicates the detected environmental information to the microprocessor 116 for consideration in controlling the external electronic devices. The environmental unit 110 includes the appropriate sensors such as light sensors, temperature sensors, sound sensors and other desirable sensors to determine the environment conditions external of the housing.

Input into the electronic system is accomplished mainly through the usage of the keypad 114. The keypad 114 includes a plurality of buttons that allow the user to execute one or more commands. The keypad 114 allows for the control of basic functions such as volume, channel manipulation, mute, and last channel. However, the keypad 114 may also include several buttons that represent a specific task such as watch television, listen to radio and various other tasks. Various other input devices may be utilized to input data into the electronic system such as a jog switch 22 (i.e. dial), motion and orientation detectors, touch sensitive screens and voice recognition. The display 104 provides information to the user such as possible tasks to complete or the current state of the external electronic devices.

C. Initializing/Synchronizing of Electronic System with External Devices

Prior to utilizing the present invention, the user must program the electronic system 100 to not only recognize all of the external electronic devices 12 to be controlled but also as to each external electronic device 12 respective current "states" (i.e. on, off, current input, current output, etc.) as is shown in FIG. 7 of the drawings.

The initial programming of the electronic system 100 may be accomplished through various well-known means such as entering a code for each specific external electronic device. "Sampling" of a signal from a remote control utilized to control a specific electronic device may also be utilized to assist in the programming of the electronic system 100. Various other methods may be utilized to program the electronic system 100 to recognize and control the external electronic devices 12 which are well known in the art.

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After all of the external electronic devices 12 have been properly programmed into the electronic system 100, the user then must program the "current state" of each external electronic device into the electronic system 100. This is accomplished typically by the user answering a series of questions shown on the display regarding each display. For example, the display may ask "Is the television turned on?" which the user would respond to. It can be appreciated that there can also be a default state for all of the external devices as being "off." All of the programmed "Current State Data" is stored within memory of the electronic system 100. D. Current State Data

"Current State Data" is data information relating to the current state of each of the external electronic devices 12 stored within the electronic system 100. The "state" of an external electronic device 12 is comprised of various variables such as but not limited to power on, power off, volume level, mute on, mute off, audio input, audio output, video input, video output, lights on, lights off, shades open, shades closed, and various other states common to external electronic devices 12. The Current State Data is updated as 20 actions and/or tasks are performed to provide an accurate reflection of the actual current state of the external electronic devices 12. The Current State Data is utilized by the electronic system 100 to determine what external electronic devices 12 require modification when a "task" is selected by 25 the electronic system 100 immediately reads the Current the user to prevent undesirable events from occurring. E. Actions

An "action" is a specific event that occurs that typically only affects one of the external devices. An example of an action is when the user selects the power button on the 30 keypad 114 to turn off the television which causes the television to switch from on to off or vice-versa.

The Current State Data is immediately modified to reflect the changed state of the television or other external electronic device after an action occurs as shown in FIGS. 9 and 35 10 of the drawings. The Current State Data is constantly updated to maintain an accurate reflection of the actual current state of the external electronic devices 12.

A "task" may be comprised of one or more "actions" 40 depending upon (1) the desired state of all external devices as prescribed by the task, and (2) the current state of all external devices. Examples of tasks are "watch television," "listen to radio," "watch video," "listen to CD's," "watch DVD", and so forth. There are many more tasks that may 45 accomplished with the present invention that are not discussed but are deemed readily apparent to one skilled in the

Each task has a "desired state" for each of the external electronic devices 12. When a task is selected, either through 50 the keypad or the display, the electronic system 100 immediately determines the Current State Data and compares this data to the "Desired State Data" for all of the external electronic devices 12. After determining which external electronic devices 12 are in the desired state and which are 55 not in the desired state, the electronic system 100 transmits a communication signal to the external electronic devices 12 that are not in the desired state to switch to the desired state based upon the task to be performed.

Another function of the present invention is to allow for 60 the electronic system 100 to determine what menu options (i.e. "tasks") that are available upon the display 104 based upon the current state of the external electronic devices 12. For example, if the television is currently on, the menu within the display may display the "Turn Television Off" 65 task instead of the "Turn Television On" task which is not required.

G. Watch Television Task Example

Assuming for the sake of example that a user using the present invention has (1) interior lighting, (2) electronically controlled shades, (3) a stereo, (4) a television, (5) a CD player, and (6) a VCR which are programmed and synchronized within the electronic system as stated above. FIG. 11 illustrates the "WATCH TELEVISION" task. Below is a sample listing of the "Current State Data" prior to the selection of the WATCH TELEVISION task as shown in FIG. 11 of the drawings.

5 Exter	Current State Data				
	External Device	Initial State Prior to Execution of Task			
	1. Room Lighting	Lights turned on and shades open during evening hours.			
	2. Stereo	Turned on with input audio from CD player.			
O	3. Television	Turned off with volume very high.			
	4. CD Player	On and playing CD.			
	5. VCR	Off.			

After selecting the desired WATCH TELEVISION task, State Data and compares the same to the "Desired State Data." Below is a listing of the Desired State Data for the WATCH TELEVISION task.

Desired State Data			
External Device	Desired State After Execution of Task		
1. Room Lighting	Light threshold at a minimum.		
2. Stereo	Turned on with input audio from television.		
3. Television	Turned on with volume at a low-medium setting.		
4. CD Player	Off.		
5. VCR	Off.		

After comparing the Current State Data to the Desired State Data, the electronic system 100 determines that the room lighting needs to be reduced by turning off lights and closing shades along with switching the audio input to the television. The electronic system 100 further determines that the television needs to be turned on and the CD player turned off. Below is a listing of the individual actions that the electronic system 100 takes to perform the WATCH TELE-VISION task.

Actions Performed to Reach Desired State			
External Device	Action Performed		
1. Room Lighting	Turn lighting off and close shades		
2. Stereo	Switch input audio to television.		
Television	Turn on and reduce volume to low-medium setting.		
4, CD Player	Turn off.		
5. VCR	No action taken.		

After the specific actions are executed to accomplish the overall task, the memory within the electronic system 100 is automatically updated to reflect the various changes to the state of each individual external electronic device 12 for reference later. Below is a listing of the Current State Data after the WATCH TELEVISION task has been performed.

Current State Data (After Execution of Task)			
External Device	Current State After Execution of Task		
1. Room Lighting 2. Stereo 3. Television 4. CD Player 5. VCR	Light threshold at a minimum. Turned on with input audio from television. Turned on with volume at a low-medium setting. Off. Off.		

The above process is repeated for the life of the statebased remote control system 10. If additional external electronic devices are added to the overall entertainment system of the user, the user simply programs the added device 12 into the electronic system 100 and synchronizes the electronic system 100 accordingly.

As to a further discussion of the manner of usage and operation of the present invention, the same should be ²⁰ apparent from the above description. Accordingly, no further discussion relating to the manner of usage and operation will be provided.

With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed to be within the expertise of those skilled in the art, and all equivalent structural variations and relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

We claim:

- 1. A state-based remote control system, comprising:
- an electronic system capable of storing, calculating and updating a simulated current state data relating to at least one external electronic device;
- a communication device connected to said electronic system for emitting a control signal to said at least one external electronic device; and
- an input unit connected to said electronic system for communicating with said electronic system;
- wherein said simulated current state data is calculated based upon at least one action performed by said electronic system in controlling said at least one electronic device.
- 2. The state-based remote control system of claim 1, 55 wherein said input unit includes a keypad having a plurality of buttons.
- The state-based remote control system of claim 2, wherein said input unit includes a display.
- 4. The state-based remote control system of claim 1, 60 wherein said electronic system is capable of performing tasks based upon a desired state data as compared to said simulated current state data.
- 5. The state-based remote control system of claim 1, wherein said electronic system only modifies a state of an 65 electronic device that has a simulated current state that does not match a desired state.

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- 6. The state-based remote control system of claim 1, wherein said communication device is able to transmit and receive data.
- The state-based remote control system of claim 1,
 wherein said electronic system is programmable to allow for the control of a plurality of external electronic devices.
- 8. A method of operating a state-based remote control system having an electronic system with a communication device and an input device for controlling at least one external electronic device, said method comprising the steps of:
 - (a) determining a simulated current state data of said at least one external electronic device;
 - (b) receiving an action request from said input device with respect to said at least one external electronic device;
 - (c) performing said action request by communicating to said at least one external electronic device; and
 - (d) modifying said simulated current state data to reflect a new state of said at least one external electronic device based upon said action request.
 - 9. The method of operating a state-based remote control system of claim 8, wherein said step (a) comprises asking a series of questions of a user regarding the current state of each of said external electronic devices.
 - 10. The method of operating a state-based remote control system of claim 8, wherein said step (a) comprises assuming all of said external electronic devices are in a predetermined current state.
 - 11. A method of operating a state-based remote control system having an electronic system with a communication device and an input device for controlling a at least one external electronic device, said method comprising the steps of:
 - (a) determining a simulated current state data of said at least one external electronic device;
 - (b) receiving a task request from said input device with respect to said at least one external electronic device, wherein said task request has a desired state data stored within said electronic system;
 - (c) determining which of said external electronic devices require a modification to their respective state in order to achieve said desired state data; and
 - (d) modifying at least one selected external electronic device to conform to said desired state data.
 - 12. The method of operating a state-based remote control system of claim 11, including the following step:
 - (e) updating said simulated current state data to reflect a new state of said at least one selected external electronic device.
 - 13. The method of operating a state-based remote control system of claim 11, wherein said step (a) comprises asking a series of questions of a user regarding an actual current state of each of said at least one external electronic device.
 - 14. The method of operating a state-based remote control system of claim 11, wherein said step (a) comprises assuming said at least one external electronic device is in a predetermined current state.
 - 15. The method of operating a state-based remote control system of claim 11, wherein said step (c) comprises comparing said simulated current state data with said desired state data.
 - 16. The method of operating a state-based remote control system of claim 11, including the step of:
 - (c) displaying a menu containing at least one task that are dependent upon a state of said at least one external electronic device.

- 17. A remote control apparatus, comprising:
- a means for storing, calculating and updating a simulated current state data relating to at least one external electronic device, wherein said simulated current state data is calculated based upon at least one action performed in controlling said at least one electronic device:
- a communication device in communication with said means, wherein said communication device is capable of emitting at least one control signal to said at least one external electronic device; and
- an input device in communication with said means.
- 18. The remote control apparatus of claim 17, wherein said means is capable of performing tasks based upon a desired state data as compared to said simulated current state data
- 19. The remote control system of claim 17, wherein said means only modifies a state of one or more electronic devices that has a simulated current state that does not match a desired state.
 - 20. A remote control apparatus, comprising:
 - an electronic circuit for storing, calculating and updating a simulated current state data relating to at least one external electronic device, wherein said simulated current state data is calculated based upon at least one action performed in controlling said at least one electronic device;
 - a communication device in communication with said electronic circuit, wherein said communication device 30 is capable of emitting at least one control signal to said at least one external electronic device; and
 - an input device in communication with said electronic circuit.
- 21. The remote control apparatus of claim 20, wherein ³⁵ said electronic circuit is capable of performing tasks based upon a desired state data as compared to said simulated current state data.
- 22. The remote control system of claim 20, wherein said electronic circuit only modifies a state of one or more 40 electronic devices that has a simulated current state that does not match a desired state.
- 23. A method of operating a remote control for controlling at least one electronic device, said method comprising the steps of:
 - determining a simulated current state data of said at least one electronic device;
 - receiving an action request from said input device with respect to said at least one electronic device;
 - performing said action request by communicating to said at least one external electronic device; and
 - modifying said simulated current state data to reflect a new state of said at least one external electronic device based upon said action request.
- 24. The method of operating a remote control system of claim 23, wherein said step of determining a simulated current state data comprises asking a series of questions of a user regarding the current state of said at least one electronic device.
- 25. The method of operating a remote control system of claim 23, wherein said step of determining a simulated current state data comprises assuming said at least one electronic device is in a predetermined current state.
- 26. A method of operating a remote control system for 65 one electronic device. controlling at least one electronic device, said method comprising the steps of:

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- determining a simulated current state data of said at least one electronic device;
- receiving a task request for said at least one electronic device, wherein said task request has a desired state data:
- determining if said at least one electronic device requires a modification to its respective state in order to achieve said desired state data; and
- modifying a selected electronic device to conform to said desired state data if a modification of state is required.
- 27. The method of operating a remote control system of claim 26, including updating said simulated current state data to reflect a new state of said selected electronic device.
- 28. The method of operating a remote control system of claim 26, wherein said step of determining a simulated current state data comprises asking a series of questions of a user regarding an actual current state of each of said at least one external electronic device.
- 29. The method of operating a remote control system of claim 26, wherein said step of determining a simulated current state data comprises assuming said at least one external electronic device is in a predetermined initial current state.
- 30. The method of operating a remote control system of claim 26, wherein said step of determining if said at least one electronic device requires a modification comprises comparing said simulated current state data with said desired state data.
- 31. The method of operating a remote control system of claim 26, including the step of displaying a menu containing at least one task that is dependent upon a state of said at least one electronic device.
- 32. A method of operating a remote control system for controlling at least one electronic device, said method comprising the steps of:
 - determining a simulated current state data of said at least one electronic device;
 - receiving a task request for said at least one electronic device, wherein said task request has a desired state data:
 - determining if said at least one electronic device requires a modification to its respective state in order to achieve said desired state data based upon a comparison of said simulated current state data with said desired state data;
 - modifying a selected electronic device to conform to said desired state data if a modification of state is required; and
 - updating said simulated current state data to reflect a new state of said selected electronic device.
- 33. The method of operating a remote control system of claim 32, wherein said step of determining a simulated current state data comprises asking a series of questions of
 a user regarding an actual current state of each of said at least one external electronic device.
- 34. The method of operating a remote control system of claim 32, wherein said step of determining a simulated current state data comprises assuming said at least one content electronic device is in a predetermined initial current state.
 - 35. The method of operating a remote control system of claim 32, including the step of displaying a menu containing at least one task that is dependent upon a state of said at least one electronic device.

* * * * *

PATENT NO. : 6,784,805 B2 Page 1 of 5

APPLICATION NO.: 09/804718
DATED: August 31, 2004
INVENTOR(S): Harris et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

IN THE CLAIMS, should read

-- 1. A state-based remote control, comprising:

a remote control capable of storing, calculating and updating a simulated current state data relating to at least one external electronic device;

a communication device connected to said remote control for emitting a control signal to said at least one external electronic device; and

an input unit connected to said remote control for communicating with said remote control;

wherein said simulated current state data is calculated and updated based upon at least one action performed by said remote control in controlling said at least one electronic device prior to a next action or a next task.

- 2. The state-based remote control of Claim 1, wherein said input unit includes a keypad having a plurality of buttons.
- 3. The state-based remote control of Claim 1, wherein said input unit includes a display.
- 4. The state-based remote control of Claim 1, wherein said remote control is capable of performing tasks based upon a desired state data as compared to said simulated current state data.
- 5. The state-based remote control of Claim 1, wherein said remote control only modifies a state of an electronic device that has a simulated current state that does not match a desired state.
- 6. The state-based remote control of Claim 1, wherein said communication device is able to transmit and receive data.
- 7. The state-based remote control of Claim 1, wherein said remote control is programmable to allow for the control of a plurality of external electronic devices.
- 8. A method of operating a state-based remote control having an electronic circuit with a communication device and an input device for controlling at least one external electronic device, said method comprising the steps of:
- (a) determining a simulated current state data of said at least one external electronic device;
- (b) receiving an action request or a task request from said input device with respect to said at least one external electronic device;
- (c) performing said action request or said task request by communicating to said at least one external electronic device; and
- (d) modifying said simulated current state data to reflect a new state of said at least one external electronic device based upon said action request or said task request prior to a next action request or a task request.

PATENT NO. : 6,784,805 B2 Page 2 of 5

APPLICATION NO.: 09/804718
DATED: August 31, 2004
INVENTOR(S): Harris et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

- 9. The method of operating a state-based remote control of Claim 8, wherein said step (a) comprises asking a series of questions of a user regarding the current state of each of said at least one external electronic device.
- 10. The method of operating a state-based remote control of Claim 8, wherein said step (a) comprises assuming said at least one external electronic device is in a predetermined current state.
- 11. A method of operating a state-based remote control having an electronic circuit with a communication device and an input device for controlling at least one external electronic device, said method comprising the steps of:
- (a) determining a simulated current state data of said at least one external electronic device;
- (b) receiving a task request from said input device with respect to said at least one external electronic device, wherein said task request has a desired state data stored within said electronic circuit;
- (c) determining which of said at least one external electronic device require a modification to their respective state in order to achieve said desired state data;
- (d) modifying at least one selected external electronic device to conform to said desired state data; and
- (e) updating said simulated current state data to reflect a new state of said at least one selected external electronic device prior to a next task or a next action.
 - 12. Canceled
- 13. The method of operating a state-based remote control of Claim 11, wherein said step (a) comprises asking a series of questions of a user regarding an actual current state of each of said at least one external electronic device.
- 14. The method of operating a state-based remote control of Claim 11, wherein said step (a) comprises assuming said at least one external electronic device is in a predetermined current state.
- 15. The method of operating a state-based remote control of Claim 11, wherein said step (c) comprises comparing said simulated current state data with said desired state data.
- 16. The method of operating a state-based remote control of Claim 11, including the step of: (e) displaying a menu containing at least one task that is dependent upon a state of said at least one external electronic device.

PATENT NO. : 6,784,805 B2 Page 3 of 5

APPLICATION NO.: 09/804718
DATED: August 31, 2004
INVENTOR(S): Harris et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

17. A remote control apparatus, comprising:

a means for storing, calculating and updating a simulated current state data relating to at least one external electronic device, wherein said simulated current state data is calculated and updated based upon at least one action performed in controlling said at least one electronic device prior to a next action or a next task;

a communication device in communication with said means, wherein said communication device is capable of emitting at least one control signal to said at least one external electronic device; and

an input device in communication with said means.

20. A remote control apparatus, comprising:

an electronic circuit for storing, calculating and updating a simulated current state data relating to at least one external electronic device, wherein said simulated current state data is calculated based upon at least one action performed in controlling said at least one electronic device prior to a next action or a next task;

a communication device in communication with said electronic circuit, wherein said communication device is capable of emitting at least one control signal to said at least one external electronic device; and

an input device in communication with said electronic circuit.

- 21. The remote control apparatus of Claim 20, wherein said electronic circuit is capable of performing tasks based upon a desired state data as compared to said simulated current state data.
- 22. The remote control apparatus of Claim 20, wherein said electronic circuit only modifies a state of one or more electronic devices that has a simulated current state that does not match a desired state.
- 23. A method of operating a remote control for controlling at least one electronic device, said method comprising the steps of:

determining a simulated current state data of said at least one electronic device; receiving an action request from said input device with respect to said at least one electronic device;

performing said action request by communicating to said at least one external electronic device; and

modifying said simulated current state data to reflect a new state of said at least one external electronic device based upon said action request prior to a next action request or a next task request.

- 24. The method of operating a remote control of Claim 23, wherein said step of determining a simulated current state data comprises asking a series of questions of a user regarding the current state of said at least one electronic device.
- 25. The method of operating a remote control of Claim 23, wherein said step of determining a simulated current state data comprises assuming said at least one electronic device is in a predetermined current state.

PATENT NO. : 6,784,805 B2 Page 4 of 5

APPLICATION NO.: 09/804718
DATED: August 31, 2004
INVENTOR(S): Harris et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

26. A method of operating a remote control for controlling at least one electronic device, said method comprising the steps of:

determining a simulated current state data of said at least one electronic device; receiving a task request for said at least one electronic device, wherein said task request has a desired state data; determining if said at least one electronic device requires a modification to its respective state in order to achieve said desired state data;

modifying a selected electronic device to conform to said desired state data if a modification of state is required; and

updating said simulated current state data to reflect a new state of said selected electronic device prior to a next task or a next action.

27. Canceled

- 28. The method of operating a remote control of Claim 26, wherein said step of determining a simulated current state data comprises asking a series of questions of a user regarding an actual current state of each of said at least one external electronic device.
- 29. The method of operating a remote control of Claim 26, wherein said step of determining a simulated current state data comprises assuming said at least one external electronic device is in a predetermined initial current state.
- 30. The method of operating a remote control of Claim 26, wherein said step of determining if said at least one electronic device requires a modification comprises comparing said simulated current state data with said desired state data.
- 31. The method of operating a remote control of Claim 26, including the step of displaying a menu containing at least one task that is dependent upon a state of said at least one electronic device.

PATENT NO.

: 6,784,805 B2

Page 5 of 5

APPLICATION NO.: 09/804718

DATED

: August 31, 2004

INVENTOR(S)

: Harris et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

32. A method of operating a remote control for controlling at least one electronic device, said method comprising the steps of:

determining a simulated current state data of said at least one electronic

device;

receiving a task request for said at least one electronic device, wherein said task request has a desired state data;

determining if said at least one electronic device requires a modification to its respective state in order to achieve said desired state data based upon a comparison of said simulated current state data with said desired state data;

modifying a selected electronic device to conform to said desired state data if a modification of state is required; and

updating said simulated current state data to reflect a new state of said selected electronic device prior to a next action request or a next task request.

- 33. The method of operating a remote control of Claim 32, wherein said step of determining a simulated current state data comprises asking a series of questions of a user regarding an actual current state of each of said at least one external electronic device.
- 34. The method of operating a remote control of Claim 32, wherein said step of determining a simulated current state data comprises assuming said at least one external electronic device is in a predetermined initial current state.
- 35. The method of operating a remote control of Claim 32, including the step of displaying a menu containing at least one task that is dependent upon a state of said at least one electronic device. --

Signed and Sealed this

Nineteenth Day of September, 2006

JON W. DUDAS Director of the United States Patent and Trademark Office

UNITED STATES DISTRICT COURT, CENTRAL DISTRICT OF CALIFORNIA CIVIL COVER SHEET

! (a) PLAINTIFFS (Check boy UNIVERSAL ELECTRO	c if you are representing yourself □) NICS INC.		DEFENDANTS LOGITECH EUROPE S.A		
yourself, provide same.) Wendy M. Mantell & Jam	ldress and Telephone Number. If you are es J. Lukas Jr. 2450 Colorado Avenue, Suite 400 East,	Santa Monica,	Attomeys (If Known)		
II. BASIS OF JURISDICTION	N (Place an X in one box only.)	III. CITIZENS	HIP OF PRINCIPAL PART in one box for plaintiff and or	'IES - For Diversity Cases ne for defendant.)	Only
□ 1 U.S. Government Plaintiff	3 Federal Question (U.S. Government Not a Party)	Citizen of This S	PTF	DEF I Incorporated or P of Business in thi	
□ 2 U.S. Government Defendan	t □ 4 Diversity (Indicate Citizenship of Parties in Item III)			☐ 2 Incorporated and of Business in Ar ☐ 3 Foreign Nation	Principal Place 5 5 5 oother State
Citizen or Subject of a Foreign Country 3 3 Foreign Nation 16 16 IV. ORIGIN (Place an X in one box only.) 1 Original Proceeding State Court Appellate Court Reopened 5 Transferred from another district (specify): 6 Multi-District Judge from Reopened 5 Transferred from another district (specify): 7 Appeal to District Judge from Magistrate Judge					
V. REQUESTED IN COMPL	AINT: JURY DEMAND: TY Yes				
CLASS ACTION under F.R.C			IONEY DEMANDED IN C		
VI. CAUSE OF ACTION (City	e the U.S. Civil Statute under which you	u are filing and writ	e a brief statement of cause. I	Do not cite jurisdictional sta	tutes unless diversity.)
VII. NATURE OF SUIT (Plac	e an X in one box only.)				
OTHER STATUTES □ 400 State Reapportionment □ 410 Antitrust □ 430 Banks and Banking □ 450 Commerce/ICC Rates/etc. □ 460 Deportation □ 470 Racketeer Influenced and Corrupt Organizations □ 480 Consumer Credit □ 490 Cable/Sat TV □ 810 Selective Service □ 850 Securities/Commodities/ Exchange □ 875 Customer Challenge 12 USC 3410 □ 890 Other Statutory Actions □ 891 Agricultural Act □ 892 Economic Stabilization Act □ 893 Environmental Matters □ 894 Energy Allocation Act □ 900 Appeal of Fee Determination Under Equal Access to Justice □ 950 Constitutionality of State Statutes	□ 120 Marine □ 316 □ 130 Miller Act □ 31: □ 140 Negotiable Instrument □ 32: □ 150 Recovery of □ 32: Overpayment & □ 33: Enforcement of □ 34: Judgment □ 34: □ 151 Medicare Act □ 34: □ 152 Recovery of Defaulted Student Loan (Excl. Veterans) □ 35: □ 153 Recovery of □ 36: Overpayment of □ 36: Veteran's Benefits □ 36: □ 160 Stockholders' Suits □ 36: □ 195 Contract Product □ 36: Liability □ 196 Franchise □ 36: REALPROPERTY □ 36: □ 210 Land Condemnation □ 36: □ 220 Foreclosure □ 36: □ 230 Rent Lease & Ejectment □ 46: □ 240 Torts to Land □ 46: □ 240 Tort Product Liability □ 46: □ 240 Tort Product Liability □ 46:	TORTS ERSONAL INJURY O Airplane S Airplane Product Liability ERSONAL INJURY O Airplane Slander Fed. Employers' Liability Marine Motor Vehicle Motor Vehicle Product Liability O Other Personal Injury Personal Injury Med Malpractice Personal Injury Product Liability Asbestos Personal Injury Product Liability MMIGRATION Naturalization Application Application Habeas Corpus- Alien Detainee Other Immigratic	PROPERTY 370 Other Fraud 371 Truth in Lending 380 Other Personal Property Damage Product Liability BANKRUPTCY 422 Appeal 28 USC 158 423 Withdrawal 28 USC 157 CIVIL RIGHTS 441 Voting 442 Employment 442 Housing/Accommodations 444 Welfare 445 American with Disabilities - Employment 446 American with Disabilities - Other 440 Other Civil Rights	Habeas Corpus ☐ 530 General ☐ 535 Death Penalty	LABOR ☐ 710 Fair Labor Standards Act ☐ 720 Labor/Mgmt. Relations ☐ 730 Labor/Mgmt. Reporting & Disclosure Act ☐ 740 Railway Labor Act ☐ 740 Railway Labor Act ☐ 791 Empl. Ret. Inc. Sccurity Act ☐ PROPERTY RIGHTS ☐ 820 Copyrights ☐ 830 Patent ☐ 840 Trademark ☐ SOCIAL SECURITY ☐ 861 HIA (1395ff) ☐ 862 Black Lung (923) ☐ 863 DIWC/DIWW (405(g)) ☐ 864 SSID Title XVI ☐ 865 RSI (405(g)) ☐ 867 Taxes (U.S. Plaintiff or Defendant) ☐ 871 IRS-Third Party 26 USC 7609

Case Number: SACV 12 - 00583 AG (MLGx)

AFTER COMPLETING THE FRONT SIDE OF FORM CV-71, COMPLETE THE INFORMATION REQUESTED BELOW.



FOR OFFICE USE ONLY:

UNITED STATES DISTRICT COURT, CENTRAL DISTRICT OF CALIFORNIA CIVIL COVER SHEET

Vill(a). IDENTICAL CASI If yes, list case number(s):	ES: Has this action been p	previously filed in this court and dismissed, remanded or closed? 🖽 No 🗆 Yes					
VIII(b). RELATED CASES If yes, list case number(s): Ca	: Have any cases been p ase No. SACV 11-105	reviously filed in this court that are related to the present case? No Yes 6-JVS(ANx)					
(Check all boxes that apply)	ses are deemed related if a previously filed case and the present case:						
IX. VENUE: (When complet	ing the following informa	ation, use an additional sheet if necessary.)					
(a) List the County in this Di Check here if the government	strict; California County nent, its agencies or emp	outside of this District; State if other than California; or Foreign Country, in which EACH named plaintiff resides. loyees is a named plaintiff. If this box is checked, go to item (b).					
County in this District:*		California County outside of this District; State, if other than California; or Foreign Country					
Orange County							
(b) List the County in this Di ☐ Check here if the government	strict; California County nent, its agencies or empl	outside of this District; State if other than California; or Foreign Country, in which EACH named defendant resides. oyees is a named defendant. If this box is checked, go to item (c).					
County in this District:*		California County outside of this District; State, if other than California; or Foreign Country					
		Logitech Europe, S.A Switzerland					
		outside of this District; State if other than California; or Foreign Country, in which EACH claim arose. on of the tract of land involved.					
County in this District:*	hhadite comments and the comments are comments and the comments and the comments and the comments are comments and the comments and the comments and the commen	California County outside of this District; State, if other than California; or Foreign Country					
Orange County							
* Los Angeles, Orange, San B Note: In land condemnation cas		entura, Sanya Barbara, or San Luis Obispy Counties					
X. SIGNATURE OF ATTORN	VEY (OR PRO PER):	Jeny M. M. Date 04/17/2012					
Notice to Counsel/Parties or other papers as required	s: The CV-71 (JS-44) C by law. This form, appro	civil Qover Sheet and the information contained herein neither replace nor supplement the filing and service of pleadings ved by the Judicial Conference of the United States in September 1974, is required pursuant to Local Rule 3-1 is not filed of statistics, venue and initiating the civil docket sheet. (For more detailed instructions, see separate instructions sheet.)					
Key to Statistical codes relating	to Social Security Cases						
Nature of Suit C	Code Abbreviation	Substantive Statement of Cause of Action					
861	НІА	All claims for health insurance benefits (Medicare) under Title 18, Part A, of the Social Security Act, as amended. Also, include claims by hospitals, skilled nursing facilities, etc., for certification as providers of services under the program. (42 U.S.C. 1935FF(b))					
862	BL	All claims for "Black Lung" benefits under Title 4, Part B, of the Federal Coal Mine Health and Safety Act of 1969. (30 U.S.C. 923)					
863	DIWC	All claims filed by insured workers for disability insurance benefits under Title 2 of the Social Security Act, as amended; plus all claims filed for child's insurance benefits based on disability. (42 U.S.C. 405(g))					
863	DIWW	All claims filed for widows or widowers insurance benefits based on disability under Title 2 of the Social Security Act, as amended. (42 U.S.C. 405(g))					
864	SSID	All claims for supplemental security income payments based upon disability filed under Title 16 of the Social Security Act, as amended.					
865	RSI	All claims for retirement (old age) and survivors benefits under Title 2 of the Social Security Act, as amended. (42 U.S.C. (g))					

UNITED STATES DISTRICT COURT CENTRAL DISTRICT OF CALIFORNIA

NOTICE OF ASSIGNMENT TO UNITED STATES MAGISTRATE JUDGE FOR DISCOVERY

Thi	s case has bee	n assigned to	District Judge	Andrew	Guilford	and the	assigned
discovery	Magistrate Ju	dge is Marc (Goldman.				

The case number on all documents filed with the Court should read as follows:

SACV12- 583 AG (MLGx)

Pursuant to General Order 05-07 of the United States District Court for the Central District of California, the Magistrate Judge has been designated to hear discovery related motions.

All discovery related motions should be noticed on the calendar of the Magistrate Judge	

NOTICE TO COUNSEL

A copy of this notice must be served with the summons and complaint on all defendants (if a removal action is filed, a copy of this notice must be served on all plaintiffs).

Sub	sequent documents must be filed a	t the	following location:		
	Western Division 312 N. Spring St., Rm. G-8 Los Angeles, CA 90012	[X]	Southern Division 411 West Fourth St., Rm. 1-053 Santa Ana, CA 92701-4516	LI	Eastern Division 3470 Twelfth St., Rm. 13 Riverside, CA 92501
Failu	re to file at the proper location will resu	It in yo	our documents being returned to you.		

Case 8:12-cv-00583-AG-MLG Document 1	Filed 04/17/12 Page 41 of 42 Page ID #:41
Name & Address: Wendy M. Mantell James J. Lukas, Jr. Greenberg Traurig, LLP 2450 Colorado Ave., Suite 400 East, Santa Monica, CA 90404	,
UNITED STATES I CENTRAL DISTRIC	DISTRICT COURT CT OF CALIFORNIA
Universal Electronics, Inc. PLAINTIFF(S)	CASE NUMBER SACV 12 - 00583 AG (MLGx)
v. Logitech Europe S.A.	SUMMONS
DEFENDANT(S).	
TO: DEFENDANT(S): A lawsuit has been filed against you. Within21 days after service of this summon must serve on the plaintiff an answer to the attached counterclaim cross-claim or a motion under Rule 1 or motion must be served on the plaintiff's attorney, Greenberg Traurig, LLP 2450 Colorado Ave., Suite 400 judgment by default will be entered against you for the ryour answer or motion with the court.	2 of the Federal Rules of Civil Procedure. The answer endy Mantell / James J. Lukas Jr. , whose address is DEast, Santa Monica, CA 90404 . If you fail to do so,
Dated: <u>04/17/2012</u>	By: Denise Volume 1146 (Seal of the Court)
[Use 60 days if the defendant is the United States or a United State 60 days by Rule 12(a)(3)].	s agency, or is an officer or employee of the United States. Allowed

ORIGINAL

Case 8:12-cv-00583-AG-MLG Document 1	Filed 04/17/12 Page 42 of 42 Page ID #:42
Name & Address:	
Wendy M. Mantell	
James J. Lukas, Jr.	
Greenberg Traurig, LLP	
2450 Colorado Ave., Suite 400 East,	
Santa Monica, CA 90404	
	S DISTRICT COURT ICT OF CALIFORNIA
Universal Electronics, Inc.	CASE NUMBER
	SACV 12 - 00583 AG (MLGx)
PLAINTIFF(S V.)
Logitech Europe S.A.	
	SUMMONS
DEFENDANT(S)	
must serve on the plaintiff an answer to the attached ☐ counterclaim ☐ cross-claim or a motion under Rule	12 of the Federal Rules of Civil Procedure. The answer Wendy Mantell / James J. Lukas Jr. , whose address is 00 East, Santa Monica, CA 90404 . If you fail to do so, e relief demanded in the complaint. You also must file
	Clerk, U.S. District Court
Dated: 04/17/2012	By: Deputy Clerk
	(Seal of the Court)
[Use 60 days if the defendant is the United States or a United Sta 60 days by Rule 12(a)(3)].	ttes agency, or is an officer or employee of the United States. Allowed
CV-01A (10/11 SUI	MMONS
	ORIGIAL