first lead embedded in a first portion of the enclosure, wherein an exterior surface of the enclosure includes an exterior surface of the first portion, wherein the first lead is positioned underneath the exterior surface of the first portion, and wherein the first lead is configured to detect a first electrical signal of the user's cardiac signal via the user's contact with the exterior surface of the first portion of the enclosure. The heart sensor also includes a second lead embedded in a second portion of the enclosure, wherein the second lead is configured to detect a second electrical signal of the user's cardiac signal via the user's contact with at least one of the second lead and the second portion of the enclosure. The processor is configured to receive and process the detected cardiac signal.

For example, "[h]eart sensor 112 can include one or more leads connected to the exterior of the electronic device such that the user may contact one or more of the leads to provide an electrical signal associated with the user's heart to heart sensor 112," and "[t]he cardiac signals detected by the heart sensor leads can be coupled to a processor incorporated in heart sensor 112, or instead provided to processor 102," where "[t]he processor may then analyze the received signals and generate, from the received signals, one or more characteristic quantities of the user's heartbeat or heart rate for authentication" (applicants' specification, paragraph [0033]). The "size and location of the leads can be selected to ensure that sufficient contact is made between the user (e.g., the user's hand or finger) and the leads for cardiac signals to be detected," where "each lead can include a pad or extended area placed on the outer or inner surface of an electronic device bezel or housing" or "an entire portion of the electronic device enclosure (e.g., a portion of a bezel or housing) can serve as a lead for the heart sensor," and the "pad or extended area can then be coupled to a wire or other connector for providing



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cardiac signals to a processor for processing" (applicants' specification, paragraph [0034]), such as leads 322 and 324 of FIG. 3. As a specific example, with respect to applicants' FIG. 4B, an enclosure of electronic device 450 may include a bezel 460, where, "[i]f the electrical conductivity and size of bezel 460, and the strength or characteristics of the cardiac signal provided by the user and detected by the heart sensor are adapted such that the signal can be transmitted along short distances in bezel 460, lead 472 of the heart sensor can be positioned against the back surface of bezel 460," or "lead 472 can be placed within the thickness of bezel 460 (e.g., in a pocket within the bezel wall), but underneath the outer surface of the bezel," where a "short thickness of bezel 460 can allow electrical signals to propagate from the user to the outer surface of bezel 460, through bezel 460, and into lead 472, which may in turn transmit the signals to a processor using connector 474" (applicants' specification, paragraph [0047]).

Gilles is directed towards heart monitoring apparatus. Gilles' FIG. 5 shows apparatus including an auxiliary device 9 with a male coupling 11 on one face for coupling to a case 3, and a female coupling 12 on another face for coupling to auxiliary electrode 7. Auxiliary device 9 is connected to several other auxiliary electrodes 13, 14, and 15 which adhere to the patient's bust in pre-determined positions via wires, as shown in Gilles' FIG. 8.

Nowhere does Gilles show or suggest an electronic device with an enclosure and a heart sensor with a first lead embedded in a first portion of the enclosure and a second lead embedded in a second portion of the enclosure, where "an exterior surface of the enclosure comprises an exterior surface of the first portion, wherein the first lead is positioned underneath the exterior surface of the first portion, and wherein the first lead is configured to detect a first electrical signal of the user's cardiac signal via the user's contact



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with the exterior surface of the first portion of the enclosure," as required by applicants' independent claim 29. That is, nowhere does Gilles show or suggest any electrode embedded in any portion of case 3 / auxiliary device 9, let alone show or suggest a first electrode embedded in a first portion of case 3 / auxiliary device 9 and a second electrode embedded in a second portion of case 3 / auxiliary device 9. Instead, each one of auxiliary electrodes 13, 14, and 15 of Gilles is distinct and independent from case 3 / auxiliary device 9 and is remotely coupled to case 3 / auxiliary device 9 via one or more wires of Gilles' FIG. 8.

On pages 2 and 3 of the Office Action, the Examiner attempts to equate the wire connecting electrode 13 to case 3 / auxiliary device 9 with the first lead of applicants' independent claim 29 and to equate the wire connecting electrode 14 to case 3 / auxiliary device 9 with the second lead of applicants' independent claim 29. However, applicants' independent claim 29 requires its first lead to be configured to "detect a first electrical signal of [a] user's cardiac signal via the user's contact with [an] exterior surface of [a] first portion of [an] enclosure [in which the first lead is embedded]," and nowhere does Gilles show or suggest that the wire connecting electrode 13 to case 3 / auxiliary device 9 is configured to detect an electrical signal of a user's cardiac signal via the user's contact with an exterior surface of case 3 / auxiliary device 9. Instead, electrode 13 is only configured to detect an electrical signal of a user's cardiac signal via the user's contact with electrode 13, which is clearly distinct from and not embedded in case 3 / auxiliary device 9.

For at least these reasons, applicants respectfully submit that applicants' independent claim 29 and all claims dependent therefrom, including claims 30-36, 39, 44, and 45, are allowable over Gilles. Therefore, applicants respectfully request that the



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rejections of claims 29-32 and 36 under 35 U.S.C. § 102(b) with respect to Gilles be withdrawn.

The Rejections Under 35 U.S.C. § 103(a)

Claims 33-35 and 39

Claims 33-35 and 39 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Gilles. Applicants respectfully submit that each one of claims 33-35 and 39, which depends from applicants' independent claim 29, is allowable over Gilles for at least some of the same reasons as applicants' independent claim 39 is allowable over Gilles. Therefore, applicants respectfully request that the rejections of claims 33-35 and 39 under 35 U.S.C. § 103(a) with respect to Gilles be withdrawn be withdrawn.

Claims 40 and 42

Claims 40 and 42 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Gilles. These rejections are respectfully traversed.

Applicants' independent claim 40 defines an electronic device for detecting a user's cardiac signal, including a heart sensor configured to detect the user's cardiac signal and a processor coupled to the heart sensor. The heart sensor includes a first lead embedded in a first portion of the electronic device, wherein the first portion of the electronic device comprises an enclosure of the electronic device, wherein the first lead is configured to detect a first electrical signal of the user's cardiac signal via the user's contact with at least one of the first lead and the first portion of the electronic device. The heart sensor also includes a second lead embedded in a second portion of the electronic device, wherein the second portion of the electronic device comprises a display screen exposed to the user through an opening in the enclosure of the



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electronic device, wherein the second lead is configured to detect a second electrical signal of the user's cardiac signal via the user's contact with at least one of the second lead and the second portion of the electronic device. The processor is configured to process the first and second electrical signals of the user's cardiac signal.

For example, as shown in applicants' FIG. 3, "electronic device 300 can include additional lead 326 embedded in or behind display 302," where "[l]ead 326 can be operative to detect a user's heart activity as the user moves a finger across display 302," and, "[u]sing lead 326, the electronic device can detect an electrical signal from a different portion of the user's body (e.g., leads 322 and 324 detect signals through a first hand, and lead 326 detects signals through the second hand), which can provide the processor with additional information for determining characteristics of the user's cardiac activity" (applicants' specification, paragraph [0043]).

Gilles is directed towards heart monitoring apparatus. Gilles' FIG. 5 shows apparatus including an auxiliary device 9 with a male coupling 11 on one face for coupling to a case 3, and a female coupling 12 on another face for coupling to auxiliary electrode 7. Auxiliary device 9 is connected to several other auxiliary electrodes 13, 14, and 15 which adhere to the patient's bust in pre-determined positions via wires, as shown in Gilles' FIG. 8.

Nowhere does Gilles show or suggest an electronic device with a heart sensor that includes "a first lead embedded in a first portion of the electronic device, wherein the first portion of the electronic device comprises an enclosure of the electronic device" as well as "a second lead embedded in a second portion of the electronic device, wherein the second portion of the electronic device comprises a display screen exposed to the user through an opening in [an] enclosure of the electronic device, wherein the second lead is



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configured to detect a second electrical signal of the user's cardiac signal via the user's contact with at least one of the second lead and the second portion of the electronic device," as required by applicants' independent claim 40. That is, nowhere does Gilles show or suggest any electrode embedded in any enclosure portion of case 3 / auxiliary device 9, let alone show or suggest a first electrode embedded in an enclosure of case 3 / auxiliary device 9 and a second electrode embedded in a display screen exposed to a user through an opening in such an enclosure of case 3 / auxiliary device 9. Instead, each one of auxiliary electrodes 13, 14, and 15 of Gilles is distinct and independent from case 3 / auxiliary device 9 and is remotely coupled to case 3 / auxiliary device 9 via one or more wires of Gilles' FIG. 8. Assuming, *arguendo*, that Gilles' auxiliary electrode 7 as coupled to case 3 / auxiliary device 9 may be equated with a first lead embedded in an enclosure of an electronic device, which applicants do not accept, nowhere does Gilles show or suggest any other electrode that may be embedded in case 3 / auxiliary device 9, let alone embedded in display 24 as enclosed within case 3. In fact, each one of all other electrodes 13, 14, and 15 of Gilles' FIG. 8 is disclosed as being positioned at different positions along the user's body distanced via wires from the position at which case 3 / auxiliary device 9 / auxiliary electrode 7 is positioned.

For at least these reasons, applicants respectfully submit that applicants' independent claim 40 and all claims dependent therefrom, including claims 42 and 46-51, are allowable over Gilles. Therefore, applicants respectfully request that the rejection of claims 40 and 42 under 35 U.S.C. § 103(a) with respect to Gilles be withdrawn.



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Conclusion

In view of the foregoing, applicants respectfully submit that claims 29-36, 39, 40, 42, and 44-51 are allowable. This application is therefore in condition for allowance. Reconsideration and prompt allowance of this application are respectfully requested.

Respectfully submitted,

Date: June 30, 2016

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Attorney for Applicants
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# Electronic Patent Application Fee Transmittal

| | |
|---|---|
| **Application Number:** | 14136658 |
| **Filing Date:** | 20-Dec-2013 |
| **Title of Invention:** | SEAMLESSLY EMBEDDED HEART RATE MONITOR |
| **First Named Inventor/Applicant Name:** | Gloria Lin |
| **Filer:** | Jeffrey Charles Aldridge/Daniel Harris |
| **Attorney Docket Number:** | P7276USC1 |

Filed as Large 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($) |
|---|---|---|---|---|
| Extension - 1 month with $0 paid | 1251 | 1 | 200 | 200 |
| **Miscellaneous:** | | | | |
| | | **Total in USD ($)** | | **200** |

# Electronic Acknowledgement Receipt

| | |
|---|---|
| **EFS ID:** | 26225268 |
| **Application Number:** | 14136658 |
| **International Application Number:** | |
| **Confirmation Number:** | 2657 |
| **Title of Invention:** | SEAMLESSLY EMBEDDED HEART RATE MONITOR |
| **First Named Inventor/Applicant Name:** | Gloria Lin |
| **Customer Number:** | 111349 |
| **Filer:** | Jeffrey Charles Aldridge/Daniel Harris |
| **Filer Authorized By:** | Jeffrey Charles Aldridge |
| **Attorney Docket Number:** | P7276USC1 |
| **Receipt Date:** | 30-JUN-2016 |
| **Filing Date:** | 20-DEC-2013 |
| **Time Stamp:** | 14:02:42 |
| **Application Type:** | Utility under 35 USC 111(a) |

## Payment information:

| | |
|---|---|
| Submitted with Payment | yes |
| Payment Type | Credit Card |
| Payment was successfully received in RAM | $200 |
| RAM confirmation Number | 14879 |
| Deposit Account | 506007 |
| Authorized User | ALDRIDGE, JEFFREY |

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 CFR 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 CFR 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 CFR 1.19 (Document supply fees)

Charge any Additional Fees required under 37 CFR 1.20 (Post Issuance fees)

Charge any Additional Fees required under 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 | | 2016-06-30_P7276USC1-Resp-Final.pdf | 96728<br>0144f4c87c232850fffe749b2e94307910b84a70 | yes | 16 |

| | Multipart Description/PDF files in .zip description | | |
|---|---|---|---|
| | **Document Description** | **Start** | **End** |
| | Response After Final Action | 1 | 1 |
| | Claims | 2 | 8 |
| | Applicant Arguments/Remarks Made in an Amendment | 9 | 16 |

| | | | | | |
|---|---|---|---|---|---|
| **Warnings:** | | | | | |
| **Information:** | | | | | |
| 2 | Fee Worksheet (SB06) | fee-info.pdf | 30800<br>a4554b153ef567ed6cb9b6276e2b77f95869eaa4 | no | 2 |
| **Warnings:** | | | | | |
| **Information:** | | | | | |
| | | | **Total Files Size (in bytes):** | 127528 | |

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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.**

# Electronic Patent Application Fee Transmittal

| | |
|---|---|
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| **Filing Date:** | 20-Dec-2013 |
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| **First Named Inventor/Applicant Name:** | Gloria Lin |
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| **Attorney Docket Number:** | P7276USC1 |

Filed as Large Entity

**Filing Fees for Utility under 35 USC 111(a)**

| Description | Fee Code | Quantity | Amount | Sub-Total in USD($) |
|---|---|---|---|---|
| **Basic Filing:** | | | | |
| **Pages:** | | | | |
| **Claims:** | | | | |
| Claims in Excess of 20 | 1202 | 4 | 80 | 320 |
| **Miscellaneous-Filing:** | | | | |
| **Petition:** | | | | |
| **Patent-Appeals-and-Interference:** | | | | |
| **Post-Allowance-and-Post-Issuance:** | | | | |

AliveCor Exhibit 1002
AliveCor, Inc. v. Apple Inc.
IPR2024-00169, U.S. Patent No. 10,076,257

| Description | Fee Code | Quantity | Amount | Sub-Total in USD($) |
|---|---|---|---|---|
| **Extension-of-Time:** | | | | |
| **Miscellaneous:** | | | | |
| | | | **Total in USD ($)** | **320** |

# Electronic Acknowledgement Receipt

| | |
|---|---|
| **EFS ID:** | 26225359 |
| **Application Number:** | 14136658 |
| **International Application Number:** | |
| **Confirmation Number:** | 2657 |
| **Title of Invention:** | SEAMLESSLY EMBEDDED HEART RATE MONITOR |
| **First Named Inventor/Applicant Name:** | Gloria Lin |
| **Customer Number:** | 111349 |
| **Filer:** | Jeffrey Charles Aldridge/Daniel Harris |
| **Filer Authorized By:** | Jeffrey Charles Aldridge |
| **Attorney Docket Number:** | P7276USC1 |
| **Receipt Date:** | 30-JUN-2016 |
| **Filing Date:** | 20-DEC-2013 |
| **Time Stamp:** | 14:05:37 |
| **Application Type:** | Utility under 35 USC 111(a) |

## Payment information:

| | |
|---|---|
| Submitted with Payment | yes |
| Payment Type | Credit Card |
| Payment was successfully received in RAM | $320 |
| RAM confirmation Number | 14933 |
| Deposit Account | 506007 |
| Authorized User | ALDRIDGE, JEFFREY |

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 CFR 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 CFR 1.17 (Patent application and reexamination processing fees)

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IPR2024-00169, U.S. Patent No. 10,076,257
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Charge any Additional Fees required under 37 CFR 1.19 (Document supply fees)

Charge any Additional Fees required under 37 CFR 1.20 (Post Issuance fees)

Charge any Additional Fees required under 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 | Fee Worksheet (SB06) | fee-info.pdf | 30420<br>daf8bfb904610a70c9b46d6579d61606e59e72d9 | no | 2 |

**Warnings:**

**Information:**

| Total Files Size (in bytes): | 30420 |
|---|---|

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**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)
Approved for use through 1/31/2014. OMB 0651-0032
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.

| PATENT APPLICATION FEE DETERMINATION RECORD<br>Substitute for Form PTO-875 | Application or Docket Number<br>14/136,658 | Filing Date<br>12/20/2013 | ☐ 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 06/30/2016

| | (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)) | * 24 | Minus | ** 20 | = 4 | X $80 = | 320 |
| Independent (37 CFR 1.16(h)) | * 3 | Minus | ***3 | = 0 | X $420 = | 0 |
| ☐ Application Size Fee (37 CFR 1.16(s)) | | | | | | |
| ☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) | | | | | | |
| | | | | | TOTAL ADD'L FEE | 320 |

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
/DEBORAH POLLARD/

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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UNITED STATES DEPARTMENT OF COMMERCE
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www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 14/136,658 | 12/20/2013 | Gloria Lin | P7276USC1 | 2657 |

111349 7590 03/02/2016

Van Court & Aldridge LLP
Apple Inc.
154 Grand St.
New York, NY 10013

| EXAMINER |
|---|
| ALTER MORSCHAUSER, ALYSSA MARGO |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3762 | |

| NOTIFICATION DATE | DELIVERY MODE |
|---|---|
| 03/02/2016 | ELECTRONIC |

**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.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@vcaiplaw.com
jaldridge@vcaiplaw.com
avancourt@vcaiplaw.com

| Office Action Summary | Application No. 14/136,658 | Applicant(s) LIN ET AL. | |
|---|---|---|---|
| | Examiner Alyssa M. Alter | Art Unit 3762 | 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 *17 November 2016*.

☐ 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) *24-36,39,40 and 42* is/are pending in the application.

5a) Of the above claim(s) *24-28* is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *29-36,39,40 and 42* 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 *20 December 2013* 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: _____.

**AliveCor Exhibit 1002**
**AliveCor, Inc. v. Apple Inc.**
**IPR2024-00169, U.S. Patent No. 10,076,257**

## DETAILED ACTION

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

### *Response to Arguments*

2. Applicant's arguments with respect to the amended claims has been considered but are moot because the arguments do not apply to any of the references being used in the current rejection.

### *Claim Rejections - 35 USC § 102*

3. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

4. The following is a quotation of the appropriate paragraphs of pre-AIA 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 29-32 and 36 are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by Gilles et al. (US 4,635,646). Gilles et al. discloses an electronic device for detecting the users cardiac signal with an enclosure and heart sensor (depicted in figure 8) wherein the heart sensor comprising a first lead (lead connecting electrode 13, as

depicted in figure 8) embedded in a first portion of the enclosure, wherein an exterior surface of the enclosure comprises an exterior surface of the first portion, wherein the first lead is positioned underneath the exterior surface of the first portion (e.g., since the lead is connected to the circuitry located within the heart sensor housing, the lead is embedded underneath an exterior surface of the first portion of the housing), and wherein the first lead is configured to detect a first electrical signal of the user's cardiac signal via the user's contact with the exterior surface of the first portion of the enclosure (see figure 8); and a second lead (e.g., lead connecting electrode 14, as depicted in figure 8) embedded in a second portion of the enclosure, wherein the second lead is configured to detect a second electrical signal of the user's cardiac signal via the user's contact with at least one of the second lead and the second portion of the enclosure; and a processor coupled to the heart sensor and configured to receive and process the detected cardiac signal (see figures 6-7).

6. As to claim 30, as depicted in figure 8, the first portion (the side where the lead connects to electrode 13) is opposite side of the second portion (the side where the lead connects to electrode 14).

7. As to claims 31-32, the first and the second portions are not electrically conductive. Therefore, they are "electrically isolated" from each other. Furthermore, the first and second portions are separated by a third portion. As such, since the first and second portions are electrically isolated from each other, the third portion disposed between the first and second portion (depicted in figure 8), would necessarily be made

of a material insufficient to transmit electrical signals (in order to maintain electrical isolation between the first and second portion).

8. As to claim 36, the examiner considers the internal cavity where the electronics and circuitry are disposed to be a "pocket" within the electronic device. Furthermore since the leads engage with the electronics and circuitry, the leads are placed within the at least one pocket.

### *Claim Rejections - 35 USC § 103*

9. 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.

10. This application currently names joint inventors. In considering patentability of the claims under pre-AIA 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of pre-AIA 35 U.S.C. 103(c) and potential pre-AIA 35 U.S.C. 102(e), (f) or (g) prior art under pre-AIA 35 U.S.C. 103(a).

11. Claims 33-35 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Gilles et al. (US 4,635,646). Gilles et al. discloses the claimed invention except for the materials and/or the second conductivity. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the materials employed in the electronic device, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the

intended use as a matter of obvious design choice. *In re Leshin, 125 USPQ 416* (See MPEP 2144.07). Furthermore, such a modification would provide the predictable results of modifying the electronic device to meet specific patient therapeutic needs and requirements.

12. As to claims 39, 40 and 42, Gilles et al. discloses a display but does not explicitly disclose where the display is located on the exterior surface or where it is located in the relation to a third lead. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the location of the display, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse, 86 USPQ 70* (see MPEP 2144.04) Furthermore, such a modification would provide the predictable results of modifying the device to meet specific patient needs and requirements (i.e. ease of utilizing or observing the display while the device is being worn).

## *Conclusion*

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 Alyssa M. Alter whose telephone number is (571)272-4939. The examiner can normally be reached on M-F 7am to 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Niketa Patel can be reached on (571) 272-4156. 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.

/Alyssa M Alter/
Primary Examiner
Art Unit 3762

| Notice of References Cited | Application/Control No. 14/136,658 | Applicant(s)/Patent Under Reexamination LIN ET AL. | |
|---|---|---|---|
| | Examiner Alyssa M. Alter | Art Unit 3762 | 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-4,635,646 A | 01-1987 | Gilles; Ascher | A61B5/02438 | 600/509 |
| | B | US- | | | | |
| | C | US- | | | | |
| | D | US- | | | | |
| | E | US- | | | | |
| | F | US- | | | | |
| | G | US- | | | | |
| | H | US- | | | | |
| | I | US- | | | | |
| | J | US- | | | | |
| | K | US- | | | | |
| | L | US- | | | | |
| | M | US- | | | | |

**FOREIGN PATENT DOCUMENTS**

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| | 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.



AliveCor Exhibit 1002
AliveCor, Inc. v. Apple Inc.
IPR2024-00169, U.S. Patent No. 10,076,257
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| Search Notes | Application/Control No. | Applicant(s)/Patent Under Reexamination |
|---|---|---|
| | 14136658 | LIN ET AL. |
| | Examiner | Art Unit |
| | ALYSSA M ALTER | 3762 |

| CPC- SEARCHED | | |
|---|---|---|
| Symbol | Date | Examiner |
| A 61 B 5/02438 | 6/15/2015 | ama |
| A 61 B 5/0245 | 6/15/2015 | ama |
| A 61 B 5/404 | 6/15/2015 | ama |

| CPC COMBINATION SETS - SEARCHED | | |
|---|---|---|
| Symbol | Date | Examiner |
| | | |

| US CLASSIFICATION SEARCHED | | | |
|---|---|---|---|
| Class | Subclass | Date | Examiner |
| 607 | 36 | 6/15/2015 | ama |
| 600 | 509 | 6/15/2015 | ama |

| SEARCH NOTES | | |
|---|---|---|
| Search Notes | Date | Examiner |
| Please see EAST search history | 6/15/2015 | ama |
| Conducted an inventor search | 6/15/2015 | ama |
| Referenced the search performed in the parent application 12/358,905 | 6/15/2015 | ama |
| Conducted an updated search | 2/25/2016 | ama |

| INTERFERENCE SEARCH | | | |
|---|---|---|---|
| US Class/ CPC Symbol | US Subclass / CPC Group | Date | Examiner |
| | | | |

/ALYSSA M ALTER/
Primary Examiner.Art Unit 3762

AliveCor Exhibit 1002
AliveCor, Inc. v. Apple Inc.
IPR2024-00169, U.S. Patent No. 10,076,257

**EAST Search History**

**EAST Search History (Prior Art)**

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|---|---|---|---|---|---|---|
| S1 | 1 | ("20100113950").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2011/08/31 17:00 |
| S5 | 463 | (340/5.82).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2011/08/31 17:04 |
| S11 | 156 | cellular same cardiac same electrodes | US-PGPUB; USPAT | AND | OFF | 2011/08/31 17:14 |
| S14 | 8 | (cellular adj phone) same cardiac same electrodes | US-PGPUB; USPAT | AND | OFF | 2011/08/31 17:16 |
| S15 | 384 | (cellular adj phone) same electrodes | US-PGPUB; USPAT | AND | OFF | 2011/08/31 17:17 |
| S16 | 8 | (cellular adj phone) same heart same electrodes | US-PGPUB; USPAT | AND | OFF | 2011/08/31 17:19 |
| S20 | 87 | alter.xa. | US-PGPUB; USPAT | AND | OFF | 2011/08/31 17:21 |
| S21 | 95 | (phone) same (cardiac or heart) same electrodes | US-PGPUB; USPAT | AND | OFF | 2011/08/31 17:31 |
| S22 | 1 | ("2005/0239493").URPN. | USPAT | AND | OFF | 2011/08/31 17:37 |
| S23 | 2 | ("2007/0270909").URPN. | USPAT | AND | OFF | 2011/08/31 17:39 |
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| S26 | 1 | ("20040034645").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2011/08/31 17:48 |
| S27 | 633 | (607/36).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2011/08/31 17:49 |
| S28 | 13 | S27 and handheld | US-PGPUB; | AND | OFF | 2011/08/31 17:49 |

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| | | | USPAT | | | |
| S29 | 467 | S27 and external | US-PGPUB; USPAT | AND | OFF | 2011/08/31 17:50 |
| S30 | 74 | ("4231098" \| "4288841" \| "4604677" \| "4614194" \| "4616655").PN. OR ("5470345").URPN. | US-PGPUB; USPAT; USOCR | AND | OFF | 2011/08/31 17:57 |
| S31 | 56 | ("4374817" \| "4379459" \| "4384585" \| "4476868" \| "4548209" \| "4556063" \| "4577633" \| "4587970" \| "4693253" \| "4726380" \| "4821723" \| "4830006" \| "4880005" \| "4949719" \| "4949730" \| "5127404" \| "5131388" \| "5144949" \| "5158078" \| "5199428" \| "5207218" \| "5312453" \| "5314430" \| "5330507" \| "5331966" \| "5354316" \| "5370669" \| "5447519" \| "5470345" \| "5545186").PN. OR ("6498951").URPN. | US-PGPUB; USPAT; USOCR | AND | OFF | 2011/08/31 17:59 |
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| S36 | 4 | ("2006/0167502").URPN. | USPAT | AND | OFF | 2011/08/31 18:13 |
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| S40 | 0 | ("2010/0113950").URPN. | USPAT | AND | ON | 2012/07/05 16:48 |
| S41 | 5 | ("20060100533" \| "3916877" \| "20100113950" \| "6546232" \| "20050239493").PN. | US-PGPUB; USPAT; USOCR | AND | ON | 2012/07/05 16:52 |
| S42 | 9 | (palm) same cardiac same electrodes | US-PGPUB; USPAT | AND | OFF | 2012/07/05 17:03 |
| S45 | 118 | (hand or fingers or finger) with cardiac with electrodes | US-PGPUB; USPAT | AND | OFF | 2012/07/05 17:06 |
| S48 | 56 | (hand or fingers or finger) with cardiac with (electrodes or electrode) with (lead or leads) | US-PGPUB; USPAT | AND | OFF | 2012/07/05 17:07 |
| S49 | 16 | (US-20100113950-$ or US-20060100533-$ or | US- | AND | ON | 2012/07/05 |

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| | | US-20070270909-$ or US-20050239493-$ or US-20040034645-$ or US-20020042634-$ or US-20020091418-$ or US-20060167502-$ or US-20020143576-$ or US-20080221930-$).did. or (US-6485416-$ or US-6546232-$ or US-7433718-$ or US-7065407-$ or US-5871515-$ or US-6522915-$).did. | PGPUB; USPAT | | | 17:12 |
| S50 | 1 | ("4592372").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2012/11/08 18:04 |
| S51 | 47 | ("3568660" \| "3664347" \| "3769984" \| "3825015" \| "3942536" \| "3995623" \| "4280511" \| "4412531" \| "4437474" \| "4458695").PN. OR ("4592372").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2012/11/08 18:05 |
| S52 | 2604 | (600/509).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2012/11/08 18:36 |
| S53 | 576 | S52 and lead and housing and external | US-PGPUB; USPAT; USOCR | AND | ON | 2012/11/08 18:36 |
| S54 | 42 | ("4108166" \| "4120294" \| "4635646" \| "4791933" \| "4809705" \| "4825874" \| "4889134" \| "5003984" \| "5300093" \| "5304209" \| "5336245" \| "5343869" \| "5383912" \| "5417222" \| "5577510" \| "5620472" \| "5623926" \| "5682902" \| "5738104").PN. OR ("6149602").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2012/11/08 18:39 |
| S55 | 14 | ("3989038" \| "4130022" \| "4606352" \| "5022410").PN. OR ("5623926").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2012/11/08 18:56 |
| S56 | 4 | ("20060026521" \| "20060026535" \| "20080076972" \| "20100011388").PN. | US-PGPUB; USPAT; USOCR | AND | ON | 2013/01/14 18:34 |
| S57 | 774 | (607/36).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2013/08/09 15:16 |
| S58 | 2840 | (600/509).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2013/08/09 15:17 |
| S59 | 643 | (340/5.82).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2013/08/09 15:17 |
| S63 | 2 | (12/358905).APP. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/15 10:56 |
| S64 | 1789 | (A61B5/02438).cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/15 12:54 |
| S65 | 1073 | (A61B5/0245).cpc. | US- | OR | OFF | 2015/06/15 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | PGPUB; USPAT; USOCR | | | 12:54 |
| S66 | 0 | (A61B5/404).cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/15 12:54 |

**EAST Search History (Interference)**

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|---|---|---|---|---|---|---|
| S60 | 0 | (607/36).CCLS. | | OR | OFF | 2013/08/09 15:16 |
| S61 | 5 | (600/509).CCLS. | | OR | OFF | 2013/08/09 15:17 |
| S62 | 3 | (340/5.82).CCLS. | | OR | OFF | 2013/08/09 15:17 |

**2/26/2016 12:58:10 PM**
**C:\Users\aalter\Documents\EAST\Workspaces\14136658.wsp**

| Application Number | Application/Control No. | Applicant(s)/Patent Under Reexamination |
|---|---|---|
| 14136658 | 14/136,658 | APPLE, INC. |
| | | |

| Document Code - DISQ | Internal Document – DO NOT MAIL |
|---|---|

| TERMINAL DISCLAIMER | ☒ APPROVED | ☐ DISAPPROVED |
|---|---|---|
| **Date Filed:** 11/17/15 | **This patent is subject to a Terminal Disclaimer** | |

Approved/Disapproved by:

2/12/16

Patricia Martin
Paralegal Specialist
Central Reexamination Unit

U.S. Patent and Trademark Office

PATENTS
P7276USC1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | |
|---|---|---|
| Applicants | : | Gloria Lin et al. |
| Application No. | : | 14/136,658 Confirmation No.: 2657 |
| Filed | : | December 20, 2013 |
| For | : | SEAMLESSLY EMBEDDED HEART RATE MONITOR |
| Art Unit | : | 3762 |
| Examiner | : | Alyssa Margo Alter Morschauser |

New York, New York 10013
November 17, 2015

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

TERMINAL DISCLAIMER
UNDER 37 C.F.R. § 1.321(b,c)

Sir:

Apple Inc., a corporation having a mailing address at 1 Infinite Loop, Cupertino, CA 95014, represents that it possesses the entire right, title and interest, by assignment, of the following United States patent and patent application:

1. U.S. Patent No. 8,615,290 for "SEAMLESSLY EMBEDDED HEART RATE MONITOR," issued December 24, 2013. Gloria Lin, Taido Nakajima, Pareet Rahul, and Andrew Hodge are the inventors of U.S. Patent No. 8,615,290, and the inventors have assigned their interests in the patent to Apple Inc., as recorded at reel 022149, frame 0581.

2. U.S. Patent Application No. 14/136,658 for "SEAMLESSLY EMBEDDED HEART RATE MONITOR," filed December 20, 2013 as a

continuation of U.S. Patent Application No. 12/358,905 from which U.S. Patent No. 8,615,290 issued. Gloria Lin, Taido L. Nakajima, Pareet Rahul, and Andrew B. Hodge are the inventors of U.S. Patent Application No. 14/136,658, and the previous assignment of U.S. Patent No. 8,615,290, recorded at reel 022149, frame 0581, applies to U.S. Patent Application No. 14/136,658 as a continuation.

The undersigned, on behalf of Apple Inc., hereby disclaims the terminal portion of the term of any patent to be issued on the present application, U.S. Patent Application No. 14/136,658, which would extend beyond the expiration date of the full statutory term of U.S. Patent No. 8,615,290.

The undersigned, on behalf of Apple Inc., agrees that any patent to be issued on the present U.S. Patent Application No. 14/136,658 shall be enforceable only for and during such period that such patent and U.S. Patent No. 8,615,290 are commonly owned, this agreement to run with any patent to be issued on U.S. Patent Application No. 14/136,658 and to be binding upon the grantee of such patent and its successors and assigns.

The undersigned, on behalf of Apple Inc., does not disclaim any terminal part of the term of any patent, to be issued on the above-identified U.S. Patent Application No. 14/136,658, that would extend to the expiration date of the full statutory term of U.S. Patent No. 8,615,290, in the event that U.S. Patent No. 8,615,290: (a) expires for failure to pay a maintenance fee, (b) is held unenforceable, (c) is found invalid, (d) is statutorily disclaimed in whole or terminally disclaimed under 37 C.F.R. § 1.321 (a, b), (e) has all claims cancelled by a reexamination certificate, or (f) is otherwise terminated prior to expiration of its statutory term, except for the separation of common ownership stated above.

The undersigned hereby states and certifies that:



**AliveCor Exhibit 1002**
**AliveCor, Inc. v. Apple Inc.**
**IPR2024-00169, U.S. Patent No. 10,076,257**
**152 of 363**

1. He is an agent of record in the above-identified patent application and is authorized to act on behalf of inventors in connection with said application; and

2. The relevant evidentiary documents have been reviewed and, to the best of the undersigned's and inventors' knowledge and belief, title to the above-identified U.S. Patent Application No. 14/136,658 is in assignee.

Respectfully submitted,

Date: November 17, 2015

/Jeffrey C. Aldridge/
Jeffrey C. Aldridge
Registration No. 51,390
Attorney for Applicants
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New York, New York 10013
Tel.: (347) 470-6620



**AliveCor Exhibit 1002**
**AliveCor, Inc. v. Apple Inc.**
**IPR2024-00169, U.S. Patent No. 10,076,257**
**153 of 363**

# Electronic Patent Application Fee Transmittal

| | |
|---|---|
| **Application Number:** | 14136658 |
| **Filing Date:** | 20-Dec-2013 |
| **Title of Invention:** | SEAMLESSLY EMBEDDED HEART RATE MONITOR |
| **First Named Inventor/Applicant Name:** | Gloria Lin |
| **Filer:** | Andrew Michael Van Court/Daniel Harris |
| **Attorney Docket Number:** | P7276USC1 |

Filed as Large 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($) |
|---|---|---|---|---|
| Extension - 2 months with $0 paid | 1252 | 1 | 600 | 600 |
| **Miscellaneous:** | | | | |
| Statutory or Terminal Disclaimer | 1814 | 1 | 160 | 160 |
| | | **Total in USD ($)** | | **760** |

# Electronic Acknowledgement Receipt

| | |
|---|---|
| **EFS ID:** | 24112982 |
| **Application Number:** | 14136658 |
| **International Application Number:** | |
| **Confirmation Number:** | 2657 |
| **Title of Invention:** | SEAMLESSLY EMBEDDED HEART RATE MONITOR |
| **First Named Inventor/Applicant Name:** | Gloria Lin |
| **Customer Number:** | 111349 |
| **Filer:** | Andrew Michael Van Court/Daniel Harris |
| **Filer Authorized By:** | Andrew Michael Van Court |
| **Attorney Docket Number:** | P7276USC1 |
| **Receipt Date:** | 17-NOV-2015 |
| **Filing Date:** | 20-DEC-2013 |
| **Time Stamp:** | 18:29:56 |
| **Application Type:** | Utility under 35 USC 111(a) |

## Payment information:

| | |
|---|---|
| Submitted with Payment | yes |
| Payment Type | Credit Card |
| Payment was successfully received in RAM | $760 |
| RAM confirmation Number | 5407 |
| Deposit Account | 506007 |
| Authorized User | ALDRIDGE, JEFFREY |

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

AliveCor Exhibit 1002
AliveCor, Inc. v. Apple Inc.
IPR2024-00769, U.S. Patent No. 10,076,257
156 of 363