

**UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

SLYDE ANALYTICS LLC,

*Plaintiff,*

v.

Zepp Health Corporation,

*Defendant.*

Case No. 2:23-cv-00172-RWS-RSP

**JURY TRIAL DEMANDED**

**DEFENDANT'S PRELIMINARY INVALIDITY CONTENTIONS**

## **I. Introduction**

Defendant Zepp Health Corporation (“Defendant” or “Zepp”) provides these Preliminary Invalidity Contentions (“Invalidity Contentions”) to Plaintiff Slyde Analytics LLC (“Plaintiff” or “Slyde”) for Case No. 2-23-cv- 00172-RWS-RSP.

Plaintiff has asserted U.S. Patent Nos. 9,804,678 (“the ’678 Patent”); 10,198,085 (“the ’085 Patent”); 8,588,033 (“the ’033 Patent”); 9,651,922 (“the ’922 Patent”); 9,320,457 (“the ’457 Patent”); 9,536,134 (“the ’134 Patent”); and 9,873,018 (“the ’018 Patent”) (collectively, “the Asserted Patents” or “the Patents-in-Suit”) against Defendant. Complaint (E.D. Tex. 2:23- cv- 00172-RWS-RSP, Dkt. 1). In Plaintiff’s Infringement Contentions served on March 20, 2024, Plaintiff has asserted the following claims against Defendant:

- A. Claims 1 through 19 of the ’033 Patent;
- B. Claims 1 through 24 of the ’922 Patent;
- C. Claims 1 through 15 of the ’678 Patent;
- D. Claims 1 through 10 of the ’085 Patent;
- E. Claims 1 through 20 of the ’018 Patent;
- F. Claims 1 through 21 of the ’457 Patent; and
- G. Claims 1 through 16 of the ’134 Patent.

Defendant’s Invalidity Contentions address those claims asserted in Plaintiff’s Infringement Contentions. Defendant submits these Invalidity Contentions without waiving any argument about the sufficiency or substance of Plaintiff’s Infringement Contentions.

Based on its investigation to date, Defendant hereby: (a) identifies each item of prior art that anticipates each asserted claim or renders it obvious; (b) specifies whether each such item of prior art anticipates each asserted claim and/or renders it obvious and, if a combination of items of prior art makes a claim obvious, identify each such combination and the motivation to combine

such items; (c) submits a chart identifying where specifically in each item of prior art each element of each asserted claim is found, including for each element that is governed by 35 U.S.C. § 112 ¶ 6, the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function; and (d) identifies any grounds of invalidity of the asserted claims based on indefiniteness under 35 U.S.C. § 112 ¶ 2 or enablement or written description under 35 U.S.C. § 112 ¶ 1. Defendant also provides their contentions pursuant to the Court's Standing Order Regarding Subject Matter Eligibility Contentions.

These Invalidity Contentions are being made in the early stages of the case. The parties have not yet started general discovery, there is no claim construction order entered in this case, and no depositions have been noticed or taken. No third-party discovery has been taken. Accordingly, Defendant reserves the right to supplement and amend these preliminary contentions following entry of a claim construction order, and to the extent additional information becomes available during discovery. For example, Defendant may serve third-party discovery on the inventors, on any prior assignees of the Patents-in-Suit, and on companies that may have relevant prior art. Defendant reserves the right to supplement and/or amend their invalidity contentions to include new prior art discovered from Plaintiff, these third-party sources, or other sources. Defendant also may serve additional third-party discovery in the future including, but not limited to, based on discovery received from Plaintiff and/or the above-referenced third parties, and reserves the right to supplement and/or amend its contentions accordingly.

Plaintiff has not yet produced in discovery the invalidity contentions served on Plaintiff by other Defendants for which Plaintiff has asserted at least one of the Asserted Patents. Such invalidity contentions include those that may have been served or will be served by the Defendants in *Slyde Analytics LLC, v. Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.*, Case No. 2:23-cv-00083-RWS-RSP (E.D. Tex.), and *Slyde Analytics LLC, v. Garmin Ltd. and Garmin USA, Inc.*, Case No. 2:24-cv-00215-RWS-RSP (E.D. Tex.), and further

including all charts, cover pleadings, exhibits, prior art, and invalidity arguments including, but not limited to, arguments based on 35 U.S.C. §§ 101, 102, 103, 112, and otherwise. Defendant hereby notifies Plaintiff that Defendant intends to incorporate by reference any such contentions once they have been produced by Plaintiff to Defendant.

In addition, pursuant to Patent Local Rule 3-4, and based on its investigation to date, Defendant has produced or is producing documents concurrently with these Invalidity Contentions (Bates Nos. ZEPP\_0000001-ZEPP\_0002973).

## **II. Reservations**

### **A. General Reservation of Rights**

Defendant reserves the right to amend these Invalidity Contentions. The information and documents that Defendant produces are based on information available to date and are subject to further revision.

The information and documents that Defendant produces are based on Defendant's present understanding of Plaintiff's infringement theories as advanced by Plaintiff in its Infringement Contentions. Plaintiff's Infringement Contentions are deficient in numerous respects. For example, Plaintiff has failed to identify specifically where each element of each asserted claim is found within each accused instrumentality. If Plaintiff attempts or is permitted to cure such deficiencies, amends its contentions, or provides additional information regarding its infringement theories, doing so may lead to further grounds for invalidity, and thus Defendant specifically reserves the right to amend, or supplement its Invalidity Contentions.

Further, because discovery (including third party discovery) is at an early stage, Defendant reserves the right to amend or supplement these Invalidity Contentions. For example, Plaintiff has not produced prior art known to it, including information regarding any known prior art products. As discovery proceeds, Defendant may serve subpoenas on third parties believed to

have knowledge, documentation, and/or corroborating evidence relating to invalidity and/or prior art, including, for example, the prior assignee of the Asserted Patents. It is therefore likely that Defendant will discover additional prior art or additional information relating to known prior art, and Defendant reserves the right to supplement these contentions after becoming aware of additional prior art or information. Defendant further reserves the right to introduce and use such supplemental materials at trial.

Defendant's claim charts in Exhibits A-G cite particular teachings and disclosures of the prior art as applied to limitations of the asserted claims. However, persons having ordinary skill in the art may view an item of prior art generally in the context of other publications, literature, products, and understanding. Accordingly, the cited portions are only exemplary, and Defendant reserves the right to rely on uncited portions of the prior art references and on other publications and expert testimony as aids in understanding and interpreting the cited portions, as providing context thereto, and as additional evidence that a claim limitation is known or disclosed. Defendant reserves the right to establish what was known to a person having ordinary skill in the art through other publications, products, and/or testimony. Defendant also reserves the right to rely on uncited portions of the prior art references, other publications, and testimony to establish that a person of ordinary skill in the art ("POSITA") would have been motivated to combine certain of the cited references so as to render the claims obvious. Citations to figures are inclusive of all discussion of those figures.

Defendant further reserves the right to argue that the asserted claims are invalid under 35 U.S.C. § 102(f) if discovery reveals that the named inventor of the Asserted Patents did not invent the subject matter recited in the asserted claims. If Defendant asserts invalidity under Section 102(f), Defendant will provide the name of the person(s) from whom, and the circumstances under which, the invention or any part of it was derived.

Defendant further intends to rely on inventor admissions concerning the scope of the

asserted claims or of the prior art relevant to the asserted claims found in, *inter alia*, the patent prosecution history and/or reexamination history for the Asserted Patents and related patents and/or patent applications; any deposition testimony of a named inventor of the Asserted Patents; and the papers filed and any evidence submitted by Plaintiff in conjunction with this litigation. Defendant reserves the right to contend that the asserted claims are invalid for failure to name the correct inventor(s), and/or to contend that Plaintiff lacks standing to bring this litigation with respect to such patents.

Furthermore, nothing stated herein shall be treated as an admission or suggestion that Defendant agrees with Plaintiff regarding the scope of any asserted claim or the claim constructions in its Infringement Contentions. To the extent that Defendant's Invalidity Contentions reflect claim constructions consistent with or suggested by Plaintiff's Infringement Contentions, no inference is intended, nor should any be drawn that Defendant agrees with Plaintiff's claim constructions. By applying any of Plaintiff's apparent claim constructions and interpretations, Defendant does not concede in any way that those constructions and interpretations are correct, but rather assert the fundamental principle that whatever infringes a claim if later in time anticipates if earlier in time. Defendant expressly reserves the right to propose alternative constructions to those that have been or may be advocated by Plaintiff.

Nor shall anything in these Invalidity Contentions be treated as an admission that Defendant's accused products meet any limitation of any asserted claim. Defendant denies that it infringes any claim of the Asserted Patents. To the extent that any prior art contains a claim element that is the same as or similar to an accused product, inclusion of that prior art in Defendant's Invalidity Contentions shall not be deemed a waiver by Defendant of any claim construction or non-infringement position. Defendant expressly reserves the right to contest any claim construction asserted by Plaintiff and expressly reserves all non-infringement arguments.

In its Infringement Contentions, Plaintiff contends that the asserted claims of the Asserted

Patents are entitled to the following priority dates:

- The '033 Patent: March 30, 2010;
- The '922 Patent: July 3, 2009;
- The '678 Patent: October 18, 2011;
- The '085 Patent: October 18, 2011;
- The '018 Patent: June 16, 2010;
- The '457 Patent: June 16, 2010; and
- The '134 Patent: June 13, 2012.

Defendant reserves the right to challenge Plaintiff's alleged priority dates or any alleged dates of conception or reduction to practice. Based on information gathered to date, Defendant specifically contends that the '085 Patent is entitled to a priority date no earlier than 10/12/12 (the filing of U.S. Patent Application No. 14/352,727). The '085 Patent is not entitled to the priority date of Swiss Patent Application No. 1689/11 (10/18/2011) ("911 Application"). The '085 Patent's claims are all directed to detecting a "wristturn." But the '911 Application contains no such disclosure and never uses the term. The '085 Patent discusses wristturn detection exclusively with respect to Figures 7a-7c, which it refers to as "another method for switching the wristwatch 1 from a first power mode to a second power mode." *See, e.g.*, '085 Patent at 3:41-43, 9:29-36. However, the '911 Application does not include Figures 7a-7c or any description of this second method. Thus, the '085 Patent is not entitled to this earlier priority date. Defendant further reserves the right to seek discovery regarding conception and reduction to practice, as appropriate, and to demonstrate earlier invention by other parties under 35 U.S.C. § 102(g), public use and/or the on-sale bar under 35 U.S.C. § 102(b), and/or applicants' failure to comply with 35 U.S.C. § 112. In addition, Defendant relies on Plaintiff's alleged priority dates in forming these Invalidity Contentions, and to the extent Plaintiff later argues, or it is determined that, any

different priority date applies, Defendant reserves the right to amend these contentions accordingly.

### **B. Plaintiff's Infringement Contentions**

Plaintiff's Infringement Contentions are deficient in multiple respects and do not provide Defendant with sufficient information to understand the specific accused features and components and the alleged factual and evidentiary bases for Plaintiff's allegations. Plaintiff has thus substantially prejudiced Defendant's ability to understand, for purposes of preparing these Contentions, what Plaintiff alleges to be the scope of the Asserted claims. Additionally, while Plaintiff purports to accuse a long list of products collectively across its Infringement Contentions, Plaintiff has, in fact, provided specific claim charts for only a limited number of products with respect to the Asserted Patents. If Plaintiff modifies any assertion or contention in its Infringement Contentions or presents any new assertion or contention relevant to these Contentions, Defendant reserves the right to move to strike any such modification or new assertion or contention, and to supplement or otherwise amend these Contentions. Defendant further reserves the right to supplement or otherwise amend these Contentions in the event the Court orders or allows Plaintiff to amend its infringement contentions.

### **C. The Intrinsic Record**

Defendant further reserves the right to rely on applicable industry standards and prior art cited in the file histories of the Asserted Patents and any related U.S. and foreign patent applications as invalidating references or to show the state of the art. Defendant further reserves the right to rely on the patent applicant's admissions concerning the scope of the prior art relevant to the Asserted Patents found in, inter alia: the patent prosecution history for the Asserted Patents and any related patents and/or parent applications or reexaminations (or inter partes review or post-grant review proceedings); any deposition testimony of a named inventor of the Asserted

Patents; any deposition testimony or other admissions by Plaintiff; and the papers filed and any evidence submitted by Plaintiff in connection with this litigation or any other litigation involving the Asserted Patents.

#### **D. Rebuttal Evidence**

Prior art not included in these preliminary invalidity contentions, whether known or not known to Defendant, may become relevant. In particular, Defendant currently is unaware of the extent, if any, to which Plaintiff will contend that limitations of the Asserted claims of the Asserted Patents are not disclosed in the prior art identified herein or otherwise contend the Asserted Patents are not invalid. To the extent that such an issue arises, Defendant reserves the right to identify other references that would anticipate and/or render obvious the allegedly missing limitation(s) or the disclosed device or method, or otherwise rebut Plaintiff's argument(s).

#### **E. Contextual Evidence**

Defendant's claim charts cite particular teachings and disclosures of the prior art as applied to the limitations of each of the Asserted claims. However, persons having ordinary skill in the art generally may view an item of prior art in the context of his or her experience and training, other publications, literature, products, and understandings. Moreover, common sense may be employed as part of the obviousness analysis. As such, Defendant may rely on the cited portions of the prior art references and on other publications, expert testimony, and common sense as aids in understanding and interpreting the cited portions, as providing context thereto, and as additional evidence that the prior art discloses a claim limitation or the claimed subject matter as a whole. Defendant further reserves the right to rely on uncited portions of the prior art references, other publications, and testimony, including expert testimony, to establish bases for combinations of certain cited references that render the Asserted claims anticipated and/or

obvious. The references discussed in the corresponding claim charts may disclose the limitations of the Asserted claims explicitly and/or inherently, and/or they may be relied on to show the state of the art in the relevant time frame. Any suggested obviousness combinations are provided in the alternative to anticipation contentions and are not to be construed to suggest that any reference included in the combinations is not by itself anticipatory.

### **III. Invalidity Under 35 U.S.C. §§ 102 and 103**

In addition to the prior art cited on the face of the Asserted Patents and related patents, the admitted prior art in the specifications of the Asserted Patents and related patents, the prior art cited in any file histories, reexaminations, inter partes review proceedings, reissue proceedings, or other examination or post-grant proceedings of the Asserted Patents and related patents, and the prior art cited in any invalidity contentions or expert reports submitted in any action or proceedings involving the Asserted patents or related patents, Defendant identifies the following prior art that anticipates each asserted claim or renders it obvious.

#### **1. Identification of Prior Art**

The following patents and patent publications are prior art to the asserted claims under at least pre-AIA 35 U.S.C. §§ 102(a), (b), (e), and/or (g) and/or pre-AIA 35 U.S.C. § 103. The identification of any patent or patent publication shall be deemed to include any counterpart patent or application filed, published, or issued anywhere in the world.

#### **A. U.S. Patent No. 8,588,033 (“the ’033 Patent”)**

| <b>Patent or Publication Number</b> | <b>Country of Origin</b> | <b>Filing Date</b> | <b>Date of Issue or Publication</b> |
|-------------------------------------|--------------------------|--------------------|-------------------------------------|
| US2009/0196124A1 (“Mooring”)        | United States of America | 01/31/2008         | 08/06/2009                          |
| US8,344,998B2 (“Fitzgerald”)        | United States of America | 01/20/2009         | 01/01/2013                          |
| JP2005/242456A (“Satoshi”)          | Japan                    | 02/24/2004         | 09/08/2005                          |
| US2008/0186808A1 (“Lee”)            | United States of America | 02/06/2008         | 08/07/2008                          |
| US2008/0151700A1 (“Inoue”)          | United States of America | 12/19/2007         | 06/26/2008                          |

|                                   |                          |            |            |
|-----------------------------------|--------------------------|------------|------------|
| US2005/0122844A1<br>("Ruchonnet") | United States of America | 01/06/2005 | 06/09/2005 |
| US2008/0168368A1 ("Louch")        | United States of America | 01/07/2007 | 07/10/2008 |
| US7,751,285B1 ("Cain")            | United States of America | 3/28/2006  | 7/6/2010   |

The following non-patent publications are prior art to the asserted claims under at least pre-AIA 35 U.S.C. §§ 102(a), (b), (e), and/or (g) and/or pre-AIA 35 U.S.C. § 103.

| <b>Title</b>                                                       | <b>Author/Publisher</b>        | <b>Date of Publication</b> |
|--------------------------------------------------------------------|--------------------------------|----------------------------|
| Physical-Based Simulation of Mechanical Watches and Clocks ("Tam") | L.C. Tam, Tom Kong, and R. Du, | 2007                       |

Below are examples of prior art references that would have been combined by one of ordinary skill in the art at the time of the alleged invention. These combinations are merely examples. The asserted claims of the '033 Patent may be rendered obvious by the following combinations:

| <b>Asserted Claims</b> | <b>Exemplary Combinations</b>                                  |
|------------------------|----------------------------------------------------------------|
| 1, 11-14               | Mooring and Satoshi                                            |
| 2-3, 17, 19            | Mooring and Satoshi and Lee                                    |
| 13-16                  | Mooring and Satoshi and Louch                                  |
| 4-5                    | Mooring and Satoshi and Inoue and Tam                          |
| 6-10, 13               | Mooring and Satoshi and Tam and Ruchonnet                      |
| 18                     | Mooring and Satoshi and Lee and Tam and Inoue and Ruchonnet    |
| 1, 11-14               | Cain and Satoshi                                               |
| 2-3, 17, 19            | Cain and Satoshi and Lee                                       |
| 13-16                  | Cain and Satoshi and Louch                                     |
| 4-5                    | Cain and Satoshi and Inoue and Tam                             |
| 6-10, 13               | Cain and Satoshi and Tam and Ruchonnet                         |
| 18                     | Cain and Satoshi and Lee and Tam and Inoue and Ruchonnet       |
| 1, 11-14               | Fitzgerald and Satoshi                                         |
| 2-3, 17, 19            | Fitzgerald and Satoshi and Lee                                 |
| 13-16                  | Fitzgerald and Satoshi and Louch                               |
| 4-5                    | Fitzgerald and Satoshi and Inoue and Tam                       |
| 6-10, 13               | Fitzgerald and Satoshi and Tam and Ruchonnet                   |
| 18                     | Fitzgerald and Satoshi and Lee and Tam and Inoue and Ruchonnet |

**B. U.S. Patent No. 9,651,922 (“the ’922 Patent”)**

| <b>Patent or Publication Number</b> | <b>Country of Origin</b> | <b>Filing Date</b> | <b>Date of Issue or Publication</b> |
|-------------------------------------|--------------------------|--------------------|-------------------------------------|
| US2008/0168368A1 (“Louch”)          | United States of America | 01/07/2007         | 07/10/2008                          |
| US8,296,684B2 (“Duarte”)            | United States of America | 05/23/2008         | 10/23/2012                          |
| US8,677,285B2 (“Tsern”)             | United States of America | 01/26/2009         | 03/18/2014                          |
| US2006/0097991A1 (“Hotelling”)      | United States of America | 05/06/2004         | 05/11/2006                          |
| US6,449,219B1 (“Hepp”)              | United States of America | 07/04/1998         | 09/10/2002                          |
| US2008/0062207A1 (“Park”)           | United States of America | 09/11/2007         | 03/13/2008                          |
| US6,714,486B2 (“Biggs”)             | United States of America | 06/29/2001         | 03/30/2004                          |
| US2009/0073132A1 (“Lee”)            | United States of America | 04/03/2008         | 03/19/2009                          |
| US10,313,505B2 (“Omernick”)         | United States of America | 09/04/2007         | 04/03/2008                          |
| US8,683,362B2 (“Shiplacoff”)        | United States of America | 04/01/2009         | 04/15/2010                          |

The following non-patent publications are prior art to the asserted claims under at least pre-AIA 35 U.S.C. §§ 102(a), (b), (e), and/or (g) and/or pre-AIA 35 U.S.C. § 103.

| <b>Title</b>                       | <b>Author/Publisher</b> | <b>Date of Publication</b> |
|------------------------------------|-------------------------|----------------------------|
| LG GD910, User Guide, (“LG GD910”) | LG                      | 2009                       |

Below are examples of prior art references that would have been combined by one of ordinary skill in the art at the time of the alleged invention. These combinations are merely examples.

| <b>Asserted Claims</b> | <b>Exemplary Combinations</b>      |
|------------------------|------------------------------------|
| 1-13, 17-24            | Duarte, Biggs and Hotelling        |
| 14-16                  | Duarte, Biggs, Hotelling and Louch |
| 1-3, 23-24             | LG GD910                           |
| 4-6, 8-11, 13-22       | LG GD910 and Louch                 |
| 7                      | LG GD910 and Hotelling             |
| 12                     | LG GD910 and Louch and Hotelling   |
| 1-4, 6-19, 21-24       | Louch                              |
| 5, 20                  | Louch and Hepp                     |
| 8, 13-17, 21-22, 24    | Louch and Duarte                   |

|                                      |                             |
|--------------------------------------|-----------------------------|
| 23                                   | Louch and Park              |
| 1-4, 6, 8, 24                        | Tsern                       |
| 5                                    | Tsern and Hepp              |
| 7                                    | Tsern and Hotelling         |
| 9-11, 13, 17-23                      | Tsern and Duarte            |
| 12                                   | Tsern, Duarte and Hotelling |
| 14-16                                | Tsern, Duarte and Louch     |
| 1-3, 9, 18                           | Lee                         |
| 4, 6, 8, 10-11, 13-17, 19, 21-22, 24 | Lee and Louch               |
| 7, 12                                | Lee and Hotelling           |
| 5                                    | Lee and Louch and Hepp      |
| 20                                   | Lee and Hepp                |
| 24                                   | Lee and Duarte              |

**C. U.S. Patent No. 9,804,678 (“the ’678 Patent”)**

| <b>Patent or Publication Number</b> | <b>Country of Origin</b> | <b>Filing Date</b> | <b>Date of Issue or Publication</b> |
|-------------------------------------|--------------------------|--------------------|-------------------------------------|
| US2009/0146962A1 (“Ahonen”)         | United States of America | 12/05/2007         | 06/11/ 2009                         |
| US9,710,048B2 (“Zhao”)              | United States of America | 10/03/2011         | 07/18/2017                          |
| US9,019,230B2 (“Li”)                | United States of America | 10/31/2010         | 04/28/2015                          |
| US2011/0242043A1 (“Yarvis”)         | United States of America | 04/06/2010         | 10/06/2011                          |
| US2010/0194682A1 (“Orr ’682”)       | United States of America | 01/29/2010         | 08/05/2010                          |
| US2009/0165219A1 (“Yeung”)          | United States of America | 12/18/2008         | 06/25/2009                          |
| US8,914,075B2 (“Pasquero”)          | United States of America | 09/17/2010         | 12/16/2014                          |
| US7,606,552B2 (“Orr ’522”)          | United States of America | 11/10/2005         | 10/20/2009                          |
| US2011/0087454A1 (“Lee”)            | United States of America | 10/01/2009         | 04/14/2011                          |

Below are examples of prior art references that would have been combined by one of ordinary skill in the art at the time of the alleged invention. These combinations are merely examples. The asserted claims of the ’678 Patent are also rendered obvious by the following combinations:

| <b>Asserted Claims</b> | <b>Exemplary Combinations</b>          |
|------------------------|----------------------------------------|
| 1-4, 10, 11, 14        | Ahonen and Orr ’682 and Lee            |
| 1-4, 10, 11, 14        | Ahonen and Orr ’682 and Lee and Yarvis |

|                   |                                                      |
|-------------------|------------------------------------------------------|
| 5, 7              | Ahonen and Orr '682 and Lee and Orr '522             |
| 6, 8, 9, 15       | Ahonen and Orr '682 and Lee and Yarvis               |
| 12, 13            | Ahonen and Orr '682 and Lee and Yeung                |
| 1-5, 7, 10-12, 14 | Orr '522 and Orr '682                                |
| 1-5, 7, 10-12, 14 | Orr '522 and Orr '682 and Lee                        |
| 1-5, 7, 10-12, 14 | Orr '522 and Orr '682 and Pasquero                   |
| 1-5, 7, 10-12, 14 | Orr '522 and Orr '682 and Pasquero and Lee           |
| 6, 8, 9, 15       | Orr '522 and Orr '682 and Li                         |
| 6, 8, 9, 15       | Orr '522 and Orr '682 and Li and Lee                 |
| 6, 8, 9, 15       | Orr '522 and Orr '682 and Pasquero and Li            |
| 6, 8, 9, 15       | Orr '522 and Orr '682 and Pasquero and Li and Lee    |
| 12, 13            | Orr '522 and Orr '682 and Pasquero and Yeung         |
| 12, 13            | Orr '522 and Orr '682 and Pasquero and Yeung and Lee |
| 1-5, 7, 10-14     | Orr '522 and Orr '682 and Yeung                      |
| 1-5, 7, 10-14     | Orr '522 and Orr '682 and Yeung and Lee              |
| 1-4, 6-11, 14-15  | Yarvis and Orr'682                                   |
| 1-4, 6-11, 14-15  | Yarvis and Orr'682 and Lee                           |
| 5                 | Yarvis and Orr'682 and Orr '522                      |
| 5                 | Yarvis and Orr'682 and Orr '522 and Lee              |
| 12-13             | Yarvis and Orr'682 and Yeung                         |
| 12-13             | Yarvis and Orr'682 and Yeung and Lee                 |
| 1-5, 10-11, 14    | Zhao and Orr '682                                    |
| 1-5, 10-11, 14    | Zhao and Orr '682 and Lee                            |
| 6, 8, 9, 15       | Zhao and Orr '682 and Yarvis                         |
| 6, 8, 9, 15       | Zhao and Orr '682 and Yarvis and Lee                 |
| 7                 | Zhao and Orr '682 and Orr '522                       |
| 7                 | Zhao and Orr '682 and Orr '522 and Lee               |
| 12-13             | Zhao and Orr '682 and Yeung                          |
| 12-13             | Zhao and Orr '682 and Yeung and Lee                  |

**D. U.S. Patent No. 10,198,085 (“the '085 Patent”)**

| Patent or Publication Number  | Country of Origin        | Filing Date | Date of Issue or Publication |
|-------------------------------|--------------------------|-------------|------------------------------|
| US5,612,931A (“Sato”)         | United States of America | 07/05/1995  | 03/18/1997                   |
| US8,344,998B2 (“Fitzgerald”)) | United States of America | 01/20/2009  | 01/01/2013                   |
| CN101458557B (“Zheng”)        | China                    | 12/14/2007  | 12/15/2010                   |

|                                |                          |            |            |
|--------------------------------|--------------------------|------------|------------|
| US2009/0164219A1 (“Yeung”)     | United States of America | 12/18/2008 | 06/25/2009 |
| US8,228,292B1 (“Ruiz”)         | United States of America | 04/02/2010 | 07/24/2012 |
| JP2010-262341A (“Shimazaki”)   | Japan                    | 04/30/2009 | 11/18/2010 |
| JP2007- 41143A (“Nishijima”)   | Japan                    | 08/01/2005 | 02/15/2007 |
| WO2006/120211A1 (“Tecchiolli”) | Italy/WIPO               | 05/10/2006 | 11/16/2006 |
| US2011/0148752A1 (“Alameh”)    | United States of America | 12/18/2009 | 06/23/2011 |
| US8,615,375B1 (“Yano”)         | United States of America | 02/11/2011 | 12/24/2011 |
| US7,606,552B2 (“Orr”)          | United States of America | 11/10/2005 | 10/20/2009 |

The following non-patent publications are prior art to the asserted claims under at least pre-AIA 35 U.S.C. §§ 102(a), (b), (e), and/or (g) and/or pre-AIA 35 U.S.C. § 103.

| <b>Title</b>                                                                           | <b>Author/Publisher</b>                                                                                              | <b>Date of Publication</b> |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------|
| gRmobile: A Framework for Touch and Accelerometer Gesture Recognition for Mobile Games | Mark Joselli, Esteban Clue<br>(Proceedings of the VIII<br>Brazilian Symposium on Games<br>and Digital Entertainment) | 10/08/2009                 |

Below are examples of prior art references that would have been combined by one of ordinary skill in the art at the time of the alleged invention. These combinations are merely examples. The asserted claims of the '085 Patent are also rendered obvious by the following combinations:

| <b>Asserted Claims</b> | <b>Exemplary Combinations</b>              |
|------------------------|--------------------------------------------|
| 1-4, 6, 8-10           | Fitzgerald and Zheng                       |
| 5, 7                   | Fitzgerald and Zheng and Ruiz              |
| 1, 6, 8, 10            | Sato and Nishijima and Zheng               |
| 2-4, 9                 | Sato and Nishijima and Zheng and Shimazaki |
| 5, 7                   | Sato and Nishijima and Zheng and Ruiz      |
| 1, 6, 8                | Tecchiolli                                 |
| 2-4, 9                 | Tecchiolli and Shimazaki                   |
| 1, 5-8, 10             | Tecchiolli and Ruiz                        |
| 2-4, 9                 | Tecchiolli and Ruiz and Shimazaki          |
| 1-10                   | Yeung and Ruiz                             |
| 1-4, 6, 8-10           | Yeung and Alameh and Joselli               |
| 5, 7                   | Yeung and Alameh and Joselli and Yano      |

|              |                                                      |
|--------------|------------------------------------------------------|
| 1-10         | Yeung and Tecchiolli and Ruiz                        |
| 1-4, 6, 8-10 | Yeung and Tecchiolli and Alameh and Joselli          |
| 5, 7         | Yeung and Tecchiolli and Alameh and Joselli and Yano |
| 1-10         | Yeung and Orr and Ruiz                               |
| 1-4, 6, 8-10 | Yeung and Orr and Alameh and Joselli                 |
| 5, 7         | Yeung and Orr and Alameh and Joselli and Yano        |

**E. U.S. Patent No. 9,873,018 (“the ’018 Patent”)**

| Patent or Publication Number     | Country of Origin        | Filing Date | Date of Issue or Publication |
|----------------------------------|--------------------------|-------------|------------------------------|
| US2006/0079800A1 (“Martikka”)    | United States of America | 06/30/2005  | 04/13/2006                   |
| US2003/0191582A1 (“Terada”)      | Japan                    | 04/04/2003  | 10/09/2003                   |
| US2008/0249736A1 (“Prstojevich”) | United States of America | 09/28/2007  | 10/09/2008                   |
| WO2008/030091A1 (“Zande”)        | Netherlands              | 09/04/2007  | 03/13/2008                   |
| WO2010/055352A1 (“Hodgins”)      | Germany                  | 11/13/2009  | 05/20/2010                   |

Below are examples of prior art references that would have been combined by one of ordinary skill in the art at the time of the alleged invention. These combinations are merely examples. The asserted claims of the ’018 Patent are also rendered obvious by the following combinations:

| Asserted Claims | Exemplary Combinations                    |
|-----------------|-------------------------------------------|
| 1-5, 7-9, 11-20 | Martikka, Terada and Prstojevich          |
| 6               | Martikka, Terada, Prstojevich and Zande   |
| 10              | Martikka, Terada, Prstojevich and Hodgins |

**F. U.S. Patent No. 9,320,457 (“the ’457 Patent”)**

| Patent or Publication Number     | Country of Origin        | Filing Date | Date of Issue or Publication |
|----------------------------------|--------------------------|-------------|------------------------------|
| US2006/0079800A1 (“Martikka”)    | United States of America | 06/30/2005  | 04/13/2006                   |
| US2011/0313705A1 (“Esser”)       | United States of America | 06/30/2005  | 04/13/2006                   |
| US2001/0313963A1 (“Hutchings”)   | United States of America | 06/17/1997  | 05/04/1999                   |
| US2008/0249736A1 (“Prstojevich”) | United States of America | 09/28/2007  | 10/09/2008                   |
| WO2008/030091A1 (“Zande”)        | Netherlands              | 09/04/2007  | 03/13/2008                   |

|                             |         |            |            |
|-----------------------------|---------|------------|------------|
| WO2010/055352A1 (“Hodgins”) | Germany | 11/13/2009 | 05/20/2010 |
|-----------------------------|---------|------------|------------|

Below are examples of prior art references that would have been combined by one of ordinary skill in the art at the time of the alleged invention. These combinations are merely examples. The asserted claims of the ’457 Patent are also rendered obvious by the following combinations:

| Asserted Claims       | Exemplary Combinations                       |
|-----------------------|----------------------------------------------|
| 1-2, 4-6, 8-15, 18-19 | Martikka and Prstojeovich                    |
| 3, 16-17, 20-21       | Martikka and Prstojeovich and Van Der Zande  |
| 7                     | Martikka and Prstojeovich and Hodgins        |
| 1-2, 4-6, 8-15, 18-19 | Hutchings and Prstojeovich                   |
| 3, 16-17, 20-21       | Hutchings and Prstojeovich and Van Der Zande |
| 7                     | Hutchings and Prstojeovich and Hodgins       |
| 1-2, 4-6, 8-15, 18-19 | Esser and Prstojeovich                       |
| 3, 16-17, 20-21       | Esser and Prstojeovich and Van Der Zande     |
| 7                     | Esser and Prstojeovich and Hodgins           |

**G. U.S. Patent No. 9,536,134 (“the ’134 Patent”)**

| Patent or Publication Number      | Country of Origin        | Filing Date | Date of Issue or Publication |
|-----------------------------------|--------------------------|-------------|------------------------------|
| US2008/0249736A1 (“Prstojeovich”) | United States of America | 09/28/2007  | 10/09/2008                   |
| US5,899,963 (“Hutchings”)         | United States of America | 06/17/1997  | 05/04/1999                   |
| CN100399994C (“Xu”)               | China                    | 07/25/2005  | 07/09/2008                   |
| JP2012090651A (“Ito”)             | Japan                    | 10/22/2010  | 05/17/2012                   |

Below are examples of prior art references that would have been combined by one of ordinary skill in the art at the time of the alleged invention. These combinations are merely examples. The asserted claims of the ’134 Patent are also rendered obvious by the following combinations:

| Asserted Claims | Exemplary Combinations |
|-----------------|------------------------|
|-----------------|------------------------|

|                 |                                   |
|-----------------|-----------------------------------|
| 1-3, 5-7, 10-15 | Prstojeovich                      |
| 1-3, 4-9, 10-15 | Prstojeovich and Xu               |
| 16              | Prstojeovich and Hutchings        |
| 16              | Prstojeovich and Xu and Hutchings |
| 1-7, 10-16      | Ito                               |
| 1- 8, 10-16     | Ito and Hutchings                 |
| 9               | Ito and Hutchings and Xu          |

Defendant also identifies each of the prior art references identified in any other cases or proceedings involving the Asserted Patents, including, but not limited to: *Slyde Analytics LLC, v. Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.*, Case No. 2:23-cv-00083-RWS-RSP (E.D. Tex.), and *Slyde Analytics LLC, v. Garmin Ltd. and Garmin USA, Inc.*, Case No. 2:24-cv-00215-RWS-RSP (E.D. Tex.). Once Plaintiff produces in discovery any such identifications, including any invalidity contentions and/or interrogatory responses, Defendant will supplement and/or amend these preliminary invalidity contentions if and as necessary.

Defendant's investigation into publicly available prior art systems that teach and/or render obvious each element of any asserted claims is ongoing. Fact discovery is at an early stage, and Defendant may require discovery from third parties regarding publicly available prior art systems. Defendant reserves the right to amend its identification of prior art systems as Defendant becomes aware of the existence, functionality, and/or characteristics of prior art systems as a result of its investigation and forthcoming discovery. In addition to the prior art products, components, systems, and methods described above, Defendant also reserves the right to rely on the documents and publications identified in the corresponding claim charts as prior art publications.

## **2. Anticipation**

Defendant contends that the Asserted claims of the Asserted Patents are invalid as anticipated under 35 U.S.C. § 102 in view of each of the prior art references charted in the

attached claim charts. The cited portions of prior art references identified in the attached claim charts are exemplary only and representative of the content and teaching of the prior art references and should be understood in the context of the reference as a whole and as they would be understood by a POSITA. To the extent any item of prior art cited above is deemed not to disclose, explicitly or inherently, any limitation of an Asserted Claim, Defendant reserves the right to argue that any difference between that prior art and the corresponding Asserted Claim would have been either inherent to the art, or obvious to a POSITA, even if Defendant has not specifically denoted that the art is to be combined with the knowledge of a POSITA.

### **3. Obviousness**

The claims of each Asserted Patent are rendered obvious by the references identified in the attached claim charts, either alone in view of the knowledge of a POSITA or in the combination with each other. Defendant contends that each prior art reference can be used in combination with each identified reference.

#### **A. Scope and Content**

All prior art contained in Defendant's invalidity contentions are within the scope and content of the prior art as illustrated in the attached claim charts. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 399 (2007).

#### **B. Level of Skill in the Art**

A POSITA as of the time of the respective alleged invention of the asserted claims or the later actual filing date of each Asserted Patent, would have had a Bachelor's degree in electrical engineering, computer engineering, computer science, or a related field, with at least two years of experience in the related industries, with an allowance for additional education or experience that might substitute for those requirements. The Asserted Patents are obvious using the aforementioned level of skill, which Defendant is using for purposes of these Contentions;

however, Defendant reserves the right to increase the skill level once they obtain discovery into the factors that may be considered in determining the level of ordinary skill in the art including: (1) type of problems encountered in the art; (2) prior art solutions to those problems; (3) rapidity with which innovations are made; (4) sophistication of the technology; and (5) educational level of active workers in the field. *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995).

### **C. Motivation to Combine**

Moreover, as explained above, it would have been obvious to a person of skill in the art at the time of the alleged invention of the asserted claims to combine any primary reference with any combination of other primary references or secondary references so as to practice the asserted claims. To the extent that Plaintiff argues that any concept claimed in the asserted claims is not disclosed in a primary reference, it would, at a minimum, have been obvious to adapt the primary reference to include the concept or combine it with other primary references or secondary references that disclose the concept. Each concept described and claimed in the Asserted Patents was known to those of skill in the art as available design choices for electronic wristwatch with a high-resolution display. The Supreme Court has held that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007). “When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one.” *Id.* at 417. As the Supreme Court made clear, “[f]or the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.” *Id.*

To determine whether there is an apparent reason to combine the known elements in the fashion claimed by the patent at issue, a court can “look to interrelated teachings of multiple

patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art.” *Id.* at 418. For example, obviousness can be demonstrated by showing “there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent’s claims.” *Id.* at 420. “[A]ny need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.* Common sense also teaches that “familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.” *Id.*

However, the Supreme Court in *KSR* held that a claimed invention can be obvious even if there is no explicit teaching, suggestion, or motivation for combining the prior art to produce that invention. In summary, *KSR* holds that patents that are based on new combinations of elements or components already known in a technical field may be found to be obvious. *See, generally, KSR*, 550 U.S. 398. Specifically, the Court in *KSR* rejected a rigid application of the “teaching, suggestion, or motivation [to combine]” test. *Id.* at 418. “In determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls. What matters is the objective reach of the claim.” *Id.* at 419. “Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.* at 420. A key inquiry is whether the “improvement is more than the predictable use of prior art elements according to their established functions.” *Id.* at 417.

The rationale to combine or modify prior art references is significantly stronger when, as here, the references seek to solve the same problem, come from the same field, and correspond well to each other. *In re Inland Steel Co.*, 265 F.3d 1354, 1362 (Fed. Cir. 2001). The Federal Circuit has held that two references may be combined as invalidating art under similar

circumstances, namely “[the prior art] focus[es] on the same problem that the . . . patent addresses: enhancing the magnetic properties of . . . steel. Moreover, both [prior art references] come from the same field Finally, the solutions to the identified problems found in the two references correspond well.” *Id.* at 1364 (concerning patents and prior art relating to improving the magnetic and electrical properties of steel).

In view of the Supreme Court’s *KSR* decision, the PTO issued a set of Examination Guidelines. Examination Guidelines for Determining Obviousness Under 35 U.S.C. §103 in view of the Supreme Court Decision in *KSR International Co. v. Teleflex, Inc.*, 72 Fed. Reg. 57526 (October 10, 2007). Those Guidelines summarized the *KSR* decision and identified various rationales for finding a claim obvious, including those based on other precedents. Those rationales include:

(A) Combining prior art elements according to known methods to yield predictable results;

(B) Simple substitution of one known element for another to obtain predictable results;

(C) Use of known technique to improve similar devices (methods, or products) in the same way;

(D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;

(E) “Obvious to try” – choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

(F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;

(G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

*Id.* at 57529. The above rationales likewise apply in rendering obvious the asserted claims of the Asserted Patents.

The references disclosed herein, alone or in combination, contain an explicit and/or

implicit teaching or motivation to combine them due to the following: (1) the knowledge generally available to a POSITA; (2) the prior art references as understood by a POSITA; (3) the nature of the problem to be solved; (4) the fact that each prior art reference addresses similar problems; and (5) the knowledge of those skilled in the art that the disclosed elements had been or could be used together.

A POSITA would also have had a reasonable expectation of success. A POSITA would have understood that these references disclose interrelated teachings based on routine technologies, including the simulation of watch components and examples of actual watch components in mechanical watches. Based on these interrelated teachings, a POSITA would have realized that it would have been possible to simulate the actual watch components shown in mechanical watches and to display the simulation on an electronic display. A POSITA would have also realized internal watch parts are of a size that they can be readily displayed on an electronic display for a watch.

By way of further example and application of the motivations to combine discussed above, Defendant provides the following additional motivations to combine certain references. These additional motivations are not intended to limit the combinations discussed above.

The references disclosed herein, alone or in combination, contain an explicit and/or implicit teaching or motivation to combine them due to the following: (1) the knowledge generally available to a POSITA; (2) the prior art references as understood by a POSITA; (3) the nature of the problem to be solved; (4) the fact that each prior art reference addresses similar problems; and (5) the knowledge of those skilled in the art that the disclosed elements had been or could be used together. The attached claim charts provide additional reasons and motivations to combine the charted references as set forth in the prior art references themselves.

#### **IV. Invalidity Contentions Under 35 U.S.C. § 112**

Defendant includes below the grounds on which Defendant contends the asserted claims are invalid for failure to meet the requirements of the first two paragraphs of 35 U.S.C. § 112.

Plaintiff has not yet provided a claim construction for many of the terms and phrases that Defendant anticipates will be in dispute. Defendant, therefore, cannot provide a complete list of its § 112 defenses because Defendant does not know whether Plaintiff will proffer a construction for certain terms and phrases that is broader than, or inconsistent with, the construction that would be supportable by the disclosure set forth in the specification.

To the extent the following contentions reflect constructions of claim limitations consistent with or implicit in Plaintiff's Infringement Contentions, no inference is intended nor should any be drawn that Defendant agrees with Plaintiff's claim constructions, and Defendant expressly reserves the right to contest such claim constructions. Defendant offers these contentions in response to Plaintiff's Infringement Contentions and without prejudice to any position it may ultimately take as to any claim construction issues.

Accordingly, Defendant reserves the right to amend or supplement these § 112 Invalidity Contentions as discovery progresses.

**A. Indefiniteness Under 35 U.S.C. § 112, ¶ 2**

35 U.S.C. § 112, ¶ 2 requires that a patent claim “particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention.” 35 U.S.C. § 112, ¶ 2. Claim terms that fail to inform those skilled in the art “with reasonable certainty . . . about the scope of the invention” fail the definiteness requirement of 35 U.S.C. § 112, ¶ 2. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014).

Each of the asserted claims are invalid as indefinite under 35 U.S.C. § 112 because they fail to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. In particular, the following limitations, read in light of the intrinsic evidence,

fail to inform those skilled in the art with reasonable certainty about the scope of the claimed inventions:

**'033 Patent**

- Claim 1: “a microcontroller being arranged for reproducing on said electronic display the simulation of a mechanical watch movement comprising a gear train, said simulation being visible so as to indicate the time, said microcontroller being further arranged for synchronizing the displayed time by said displayed mechanical movement with that of said quartz oscillator”
- Claim 2: “and the position of at least one component of said movement can be modified by pressing on the position of said electronic display corresponding to said component”
- Claim 3: “said microcontroller is arranged for displaying the simulation of a movement and wherein the angular position of at least one element of said gear-train can be modified by pressing on said touch sensor”
- Claim 6: “said microcontroller being arranged for modifying the position of at least one of said elements of said movement according to the data from said accelerometer” (lack of antecedent basis)
- Claim 7: “said displayed mechanical movement is an automatic movement with an oscillating mass”
- Claim 9: “the microcontroller being arranged for calculating and displaying a simulation of the oscillations of said displayed regulating organ taking into account the mass of said balance and the rigidity of said returning element, wherein the displayed time depends on said simulation”
- Claim 10: “means for modifying the running of said displayed regulating organ according to the accelerations to which the watch is subjected”
- Claim 11: “arranged for performing said synchronization periodically in an automatic

manner”

- Claim 12: “means for entering and executing a request for said synchronization by the user”
- Claim 13: “arranged for displaying said mechanical movement on the whole surface of the electronic display so as to occupy the position and the dimensions of a real mechanical movement”
- Claim 16: “a microcontroller being arranged for reproducing on said electronic display a simulation of a mechanical watch movement comprising a gear train visible so as to indicate the time and for synchronizing the displayed time by said displayed mechanical movement with that of said quartz oscillator”
- Claim 17: “displaying on an electronic display of a simulated mechanical watch movement comprising a gear train and of time indicators so as to simulate a mechanical watch”
- Claim 18, in its entirety.
- Claim 18: “the angular position of at least one element of the gear train displayed on said display is modified by pressing on said element”
- Claim 18: “the position of at least one element of said movement is modified according to the data from an accelerometer”
- Claim 18: “the oscillations of a regulating organ displayed on said display are simulated taking into account the simulated mass of a simulated balance and the rigidity of a returning element displayed on said display, with the time displayed being dependent on said simulation”
- Claim 18: “the running of said displayed regulating element is modified according to the accelerations to which the watch is subjected”

- Claim 18: “the running of a quartz oscillator is synchronized periodically or upon request from the user with the time displayed by said mechanical movement”
- Claim 18: “said displayed mechanical movement is displayed on the entire surface of the electronic display so as to occupy the position and the dimensions of a real mechanical movement”

### **'922 Patent**

- Claim 1: “a processing circuit specifically laid out so as to interpret the signals from the touch-sensitive glass, for selecting a card from several available cards depending on these signals and for displaying said card on the entire digital matrix display”
- Claim 1: “wherein said processing circuit is specifically laid out so as to cause said several available cards to scroll past in order to lastingly replace the initially displayed card with a replacement card selected between said several available cards, wherein each card of said several available cards has a distinct fixed or periodically refreshed image”
- Claim 1: “wherein one card of said several available cards and occupying the entire digital matrix display is immediately and without further user intervention replaced after the scrolling by a different card of said several available cards that occupies the entire digital matrix display”
- Claim 1: “wherein said processing circuit is further laid out so that the replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display”
- Claim 2: “wherein each card shows a particular function of the wristwatch”
- Claim 3: “each card defines the behavior of the touch-sensitive glass interface and the functions or modules that are to be launched depending on the movements of the finger

on the card”

- Claim 4: “wherein said cards are arranged in a plurality of levels, wherein the choice of a card within each level is made either by scrolling vertically or by scrolling horizontally, wherein a particular command makes it possible to switch from one level to another”
- Claim 5: “wherein at least one of said cards makes it possible to calculate and display a simulation of a mechanical watch displaying the time, so as to enable the user to change the mechanical watch displayed by scrolling cards”
- Claim 6: “the processing circuit being laid out for detecting simultaneous contacts on several points of the touch-sensitive glass so as to constitute a multi-touch haptic screen”
- Claim 7: “the processing circuit being laid out for determining the displacement of the center of gravity of the contact zone of the finger on the touch-sensitive glass”
- Claim 9: “scrolling on a digital matrix display of several available cards so as for said scrolling to stop of itself so as to align an edge of the replacement card with an edge of the matrix display”
- Claim 9: “wherein one card of said several available cards and occupying the entire digital matrix display is replaced after the scrolling, immediately and without further user intervention, by a different card selected between said several available cards and occupying the entire digital matrix display”
- Claim 9: “wherein the scrolling direction depends only on the direction of said movement so that said replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display”
- Claim 9: “lastingly displaying the replacement card on the whole of said digital matrix display, wherein each card of said several available cards has a distinct fixed or periodically refreshed image”

- Claim 10: “the entering of a touch command for confirming or stopping the scrolling”
- Claim 12: “the determining of the displacement of the center of gravity of the contact zone of the finger on the two-dimensional touch-sensitive glass”
- Claim 13: “the different cards scroll in continuous fashion on the digital matrix display, the scrolling being interrupted so as to align the edge of a card with the edge of the digital matrix display”
- Claim 14: “the card scrolling speed or amplitude depend on the speed or amplitude of movement of the finger on the two-dimensional touch-sensitive glass”
- Claim 17: “the card scrolling is interrupted by a brief pressure on the two-dimensional touch-sensitive, so as to cause the card best centered on the display at the time of the interruption to be selected and displayed”
- Claim 19: “said cards are arranged in a plurality of levels, wherein the method comprises a step of vertical or horizontal scrolling and a step of entering a particular command for switching from one level to another”
- Claim 20: “a plurality of said cards displays a simulation of a virtual mechanical movement”
- Claim 23: “a processing circuit specifically laid out so as to interpret the signals from the touch-sensitive glass, for selecting a card from several available cards depending on these signals and for displaying said card on the entire digital matrix display, wherein each card has a distinct fixed or periodically refreshed image”
- Claim 23: “wherein said processing circuit is specifically laid out so as to cause said several available cards to scroll past by displaying the image of said cards one at a on the digital matrix display in order to lastingly replace the initially displayed card with a replacement card selected within said several available cards, immediately after the scrolling and without further user intervention”

- Claim 23: “wherein said processing circuit is further laid out so that the replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display”
- Claim 24: “a processing circuit specifically laid out so as to interpret the signals from the touch-sensitive glass, for selecting a card from several available cards depending on these signals and for displaying said card on the entire digital matrix display”
- Claim 24: “wherein said processing circuit is specifically laid out so as to cause cards to scroll past in order to lastingly replace the initially displayed card with a replacement card, wherein each card has a fixed or periodically refreshed image”
- Claim 24: “wherein said processing circuit is further laid out so that the replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display”

#### **'678 Patent**

- Claim 1: “ wherein the inertial sensor comprises an accelerometer and a processor and/or other processing means,” “wherein the wristwatch comprises a microcontroller controlling a display of indication on a digital matrix display of the wristwatch,” “ a touch controller for interpreting touch signal provided by a touch panel underneath a cover glass and for converting said signals into command signal,” “using the accelerometer of the inertial sensor for generating an acceleration signal used for detecting a gesture on the cover glass of said wristwatch, while the microcontroller and the touch controller are in a sleep power mode,” “using the processor and/or other processing means of the inertial sensor for discriminating between gesture and no gesture based on a direction of said

acceleration signal and on a slope or frequency of said acceleration signal as measured by said accelerometer being a three dimensional accelerometer,” “using the touch controller for detecting a tap gesture on the cover glass with the touch panel,” “waking up the microcontroller in said wristwatch upon detection of a tap gesture by said touch controller,” “using said microcontroller for detecting said gesture and for discriminating between gesture and no gesture based at least on signals from the touch panel”

- Claim 4: “determining said frequency and determining that there is no gesture if said frequency is not in a predetermined frequency range compatible with a tap”
- Claim 5: “determining that there is no gesture if said direction is not substantially perpendicular to said cover glass”
- Claim 6: “applying a power supply sufficient for detecting a gesture to only a first subset of said touch areas”
- Claim 8: “partially waking up said touch panel upon detection of a gesture by said accelerometer”
- Claim 10: “waking up a microcontroller in said wristwatch upon detection of a gesture by said accelerometer and with said touch panel”
- Claim 11: “said gesture being a tap or a double tap”
- Claim 12: “detecting a wristturn with said accelerometer, and switching said wristwatch from said first power mode to said second power mode when a wristturn has been detected”
- Claim 13: “detecting that the wristwatch remains substantially immobile during a predetermined duration”
- Claim 14: “a touch panel underneath a cover glass of said wristwatch for detecting a gesture on said cover glass,” “an inertial sensor comprising an accelerometer and a

processor and/or other processing means, said accelerometer being arranged for generating an acceleration signal and the processor and/or other processing means being arranged for discriminating between gesture and no gesture based on a direction of said acceleration signal as measured by said accelerometer being a three dimensional accelerometer, and on a slope or frequency of said acceleration signal, while the microcontroller and the touch controller are in a sleep power mode,” “wherein touch controller is commanded so as to be switched to said second power mode upon gesture detection by said inertial sensor and for detecting a tap gesture on the cover glass with the touch panel,” “wherein the microcontroller is arranged for controlling a display of indication on the display and commanded so as to be switched to said second power mode upon a tap gesture detection by said touch controller,”

- Claim 15: “wherein said touch panel comprises a plurality of touch areas and powering means arranged for powering only a first subset of said touch area upon detection of a gesture by said accelerometer, and for powering a larger subset in said second power mode”

#### **'085 Patent**

- Claim 1: “switching said wristwatch from said first power mode to said second power mode when a wristturn has been detected,” “detecting that the orientation of the wristwatch is held within a first range for a defined time,” “detecting that the orientation is in a second range different from said first range,” “detecting that the wristwatch remains substantially immobile during a predetermined duration,” “that a duration between the starting position and the final position is in a predefined range”
- Claim 6: “in response to a detection that the orientation of the wristwatch is held within this second range for a defined time, registering that an orientation of the wristwatch is in

the final position,” “said duration between the starting position and the final position is provided by measuring a duration between the starting position and the registering of the final position”

- Claim 7: “wherein said defined time is 50 ms” (ambiguous antecedent basis)
- Claim 8: “detecting that a duration between the wristwatch being held in the first range and the wristwatch being held in the second range is in a predefined third range”
- Claim 9: “said step of detecting that the orientation of the wristwatch is then in a second range comprises detecting that a display of the wristwatch is oriented towards a face of the user”
- Claim 10: “in response of a detection of the orientation of the wristwatch is in the second range, checking if the orientation of the wristwatch was in the first range during a previous step”

### **'018 Patent**

- Claim 1: “supplying at least one sequence of acceleration data in at least a vertical direction whilst the runner travels a distance on a running course,” “calculating, during or at the end of the run, biomechanical parameters of the stride of said runner, on the basis of said acceleration data, of a distance measured by said GPS receiver and/or by said accelerometer, and of a duration counted by said chronograph,” “vertical oscillation of a center of gravity of said runner,” “a distance the center of gravity lowers and a distance the center of gravity elevates in a stride,” “a sum of the lowering and of the elevation of the center of gravity,” “determining an anteroposterior direction during the run of the runner,” “calculating, during or at the end of the run, at least some of the biomechanical parameters of the stride of said runner, also on the basis of said acceleration data in said anteroposterior direction”

- Claim 3: “the center of mass being located at a place where the device and/or the accelerometer is fastened”
- Claim 4: “wherein said lowering of said center of gravity is obtained as a function of a maximum bearing force, of a contact time and of a mass of the runner”
- Claim 5: “wherein said elevation of said centre of gravity is obtained as a function of a vertical takeoff speed”
- Claim 6: “wherein said biomechanical parameters include a stiffness, calculated as a function of a maximum bearing force and of said lowering”
- Claim 7: “wherein said biomechanical parameters include a stride regularity index, calculated on a basis of the reactivity dispersion determined by means of said acceleration data”
- Claim 8: “wherein said biomechanical parameters include a fatigue level indicator calculated on the basis of said regularity index”
- Claim 9: “wherein said biomechanical parameters include the asymmetry between at least one parameter of a left leg and at least one corresponding parameter of a right leg”
- Claim 10: “wherein said biomechanical parameters include an injury risk indicator calculated on the basis of said asymmetry”
- Claim 11: “wherein said biomechanical parameters include a takeoff angle of the centre of gravity at a moment when the foot leaves the ground, obtained from an average speed and a vertical speed at a moment of takeoff”
- Claim 12: “wherein said average speed is calculated on the basis of said travelled distance and said duration counted by said chronograph, whilst said vertical speed at the moment of takeoff is obtained by integration of said acceleration data”
- Claim 13: “a landing angle of a leg on the ground”

- Claim 14: “a distance travelled by the runner's centre of gravity during a duration when the foot is in contact with the ground”
- Claim 15: “wherein a sequence of acceleration data in at least a lateral direction is measured by said accelerometer and processed separately from said sequence of acceleration data in the vertical direction in order to calculate at least some of said parameters”
- Claim 16: “wherein the vertical direction is determined on the basis of the acceleration data when the runner is at a standstill”
- Claim 17: “wherein said anteroposterior direction is determined by determining a spatial direction in which displacement is greatest”
- Claim 18: “wherein a transformation of a frame of reference is performed when the axes of said accelerometer do not coincide with a vertical respectively anteroposterior axes”
- Claim 19: “a variation of a stiffness of the leg muscles”
- Claim 20: “calculating said distance travelled by the runner's center of gravity during a duration when the foot is in contact with the ground, on the basis of the speed on said anteroposterior direction”

#### **'457 Patent**

- Claim 1: “supplying at least one sequence of acceleration data in at least a vertical direction whilst the runner travels a distance on a running course,” “calculating, during or at the end of the run, biomechanical parameters of the stride of said runner on the basis of said acceleration data, of said distance and of a duration counted by said chronograph, and for displaying said parameters on said display, wherein the biomechanical parameters of the stride comprises the vertical oscillation of the center of gravity of said runner between a lowest position and a highest vertical position of the center of gravity of said

runner, and include the distance the center of gravity lowers and/or the distance the center of gravity elevates in a stride, and/or sum of the lowering of the center of gravity of said runner from a first highest vertical position to a second lowest vertical position and of the elevation of the center of gravity of said runner from the second lowest vertical position to the first highest vertical position, and wherein the biomechanical parameters are calculated at each stride, and wherein the digital processor is further programmed for calculating an average, per stride, of at least some calculated biomechanical parameters of the stride, wherein said lowering of said center of gravity is obtained as a function of maximum bearing force, of contact time and of the runner's mass, wherein the maximum bearing force is multiplied by the square of the contact time and divided by the runner's mass and wherein the function includes at least a constant”

- Claim 2: “wherein said elevation of said center of gravity is obtained as a function of vertical takeoff speed”
- Claim 3: “wherein said biomechanical parameters include a stiffness, calculated as a function of said maximum bearing force and of said lowering”
- Claim 4: “wherein said biomechanical parameters include a stride regularity index, calculated on the basis of the reactivity dispersion determined by means of said acceleration data”
- Claim 5: “wherein said biomechanical parameters include a fatigue level indicator on the basis of said regularity index”
- Claim 6: “wherein said biomechanical parameters include the asymmetry between at least one parameter of the left leg and at least one corresponding parameter of the right leg”
- Claim 7: “wherein said biomechanical parameters include an injury risk indicator calculated on the basis of said asymmetry”

- Claim 8: “wherein said biomechanical parameters include a takeoff angle of the center of gravity at the moment when the foot leaves the ground, obtained from an average speed and a vertical speed at the moment of takeoff”
- Claim 9: “wherein said average speed is calculated on the basis of said travelled distance and said duration counted by said chronograph, whilst said vertical speed at the moment of takeoff is obtained by integration of said acceleration data”
- Claim 10: “a landing angle of the leg on the ground”
- Claim 11: “the distance travelled by the runner's center of gravity during the duration when the foot is in contact with the ground”
- Claim 12: “wherein a sequence of acceleration data in at least the anteroposterior direction is measured by said accelerometer and processed separately from said sequence of acceleration data in the vertical direction in order to calculate at least some of said parameters”
- Claim 13: “wherein a sequence of acceleration data in at least the lateral direction is measured by said accelerometer and processed separately from said sequence of acceleration data in the vertical direction in order to calculate at least some of said parameters”
- Claim 14: “wherein an anteroposterior direction is determined by determining the spatial direction in which the displacement is largest”
- Claim 15: “a self-sufficient electric power source,” “a triaxial accelerometer capable of supplying at least one sequence of acceleration data in at least the vertical direction whilst the runner travels a distance on a running course,” “calculating, during or at the end of a run, biomechanical parameters of the stride of said runner on the basis of acceleration data, of distance and of a duration counted by said chronograph, and wherein the

biomechanical parameters of the stride comprise the vertical oscillation of the center of gravity of said runner between a first lowest vertical position and a second highest vertical position, and include the distance the center of gravity lowers and/or the distance the center of gravity elevates in a stride, and/or sum of the lowering of the center of gravity of said runner from the second highest vertical position to the first lowest vertical position and of the elevation of the center of gravity of said runner from the first lowest vertical position to the second highest vertical position,” “calculating an average, per stride, of at least some calculated biomechanical parameters of the stride,” “obtaining said lowering of said center of gravity as a function of maximum bearing force, of contact time and of the runner's mass, wherein the maximum bearing force is multiplied by the square of the contact time and divided by the runner's mass and wherein the function includes at least a constant”

- Claim 16: “a self-sufficient electric power source,” “a digital processor programmed for calculating, during or at the end of the run, biomechanical parameters of the stride of said runner on the basis of said acceleration data, of said distance and of a duration counted by said chronograph, and for displaying said parameters on said display, wherein the biomechanical parameters of the stride comprises a stiffness parameter based on the maximum force exerted by the ground on the foot and on the lowering of the center of gravity when this maximum force is exerted, and wherein the biomechanical parameters are calculated at each stride, wherein said lowering of said center of gravity is obtained as a function of maximum bearing force, of contact time and of the runner's mass, wherein the maximum bearing force is multiplied by the square of the contact time and divided by the runner's mass and wherein the function includes at least a constant, and wherein the digital processor is further programmed for calculating an average, per stride, of at least

some calculated biomechanical parameters of the stride”

- Claim 17: “a self-sufficient electric power source,” “a triaxial accelerometer capable of supplying at least one sequence of acceleration data in at least the vertical direction whilst the runner travels a distance on a running course,” “calculating, during or at the end of a run, biomechanical parameters of the stride of said runner on the basis of acceleration data, of distance and of a duration counted by said chronograph, and wherein the biomechanical parameters of the stride comprise the vertical oscillation of the center of gravity of said runner between a first lowest vertical position and a second highest vertical position, and include the distance the center of gravity lowers and/or the distance the center of gravity elevates in a stride, and/or sum of the lowering of the center of gravity of said runner from the second highest vertical position to the first lowest vertical position and of the elevation of the center of gravity of said runner from the first lowest vertical position to the second highest vertical position,” “calculating an average, per stride, of at least some calculated biomechanical parameters of the stride,” “obtaining said lowering of said center of gravity as a function of maximum bearing force, of contact time and of the runner's mass, wherein the maximum bearing force is multiplied by the square of the contact time and divided by the runner's mass and wherein the function includes at least a constant”

- Claim 18: “wherein said function of maximum bearing force, of contact time and of the runner's mass is defined by the formula

$$A f(F_{\max}, T_c, M) = |(F_{\max} * T_c^2) / (M * \pi^2) + (G * T_c^2) / 8|$$

wherein Fmax is the maximum bearing force, T<sub>c</sub> the contact time, M the runner's mass, G the gravity acceleration constant”

- Claim 19: “wherein said function of maximum bearing force, of contact time and of the

runner's mass is defined by the formula

$$A_f(F_{\max}, T_c, M) = |-(F_{\max} * T_c^2)/(M * \pi^2) + (G * T_c^2)/8|$$

wherein  $F_{\max}$  is the maximum bearing force,  $T_c$  the contact time,  $M$  the runner's mass,  $G$  the gravity acceleration constant”

- Claim 20: “wherein said function of maximum bearing force, of contact time and of the runner's mass is defined by the formula

$$A_f(F_{\max}, T_c, M) = |-(F_{\max} * T_c^2)/(M * \pi^2) + (G * T_c^2)/8|$$

wherein  $F_{\max}$  is the maximum bearing force,  $T_c$  the contact time,  $M$  the runner's mass,  $G$  the gravity acceleration constant”

- Claim 21: “wherein said function of maximum bearing force, of contact time and of the runner's mass is defined by the formula

$$A_f(F_{\max}, T_c, M) = |-(F_{\max} * T_c^2)/(M * \pi^2) + (G * T_c^2)/8|$$

wherein  $F_{\max}$  is the maximum bearing force,  $T_c$  the contact time,  $M$  the runner's mass,  $G$  the gravity acceleration constant”

### **'134 Patent**

- Claim 1: “an accelerometer adapted to be worn by an athlete close to the center of gravity of the athlete,” “a user-worn device with a processing system integral thereto such that the processing system can be worn by the athlete,” “wherein the accelerometer is further configured such that it can wirelessly communicate acceleration data, relating to the acceleration of the athlete, to the processing system, and wherein the processing system is configured such that, during use, it requests acceleration data from the accelerometer only when a predefined event has occurred, and such that it can process the acceleration data it receives from the accelerometer to provide athletic performance information”
- Claim 2: “wherein at least some of said predefined event depends on the output of said

global positioning system”

- Claim 3: “wherein at least some of said predefined event depends on the output of said altimeter”
- Claim 4: “electronic clock module,” “an inactive event wherein the inactive event is an event defined by when none of one or more selected predefined events occurring”
- Claim 5: “contact time; duration of stride; distance covered in a stride; speed; stride length; stride frequency; vertical displacement of the center of gravity; take-off angle; reactivity; stiffness; efficiency; force contact; distance contact; landing angle; regularity”
- Claim 6: “monitor a plurality of parameters relating to an environment and/or movement of the athlete,” “the geographical position of the user, the heart rate of the athlete, speed of the user, distance an athlete has travelled, slope of the terrain on which the athlete is travelling, direction in which the athlete is travelling”
- Claim 7: “target values for one or more parameters relating to the environment and/or movement of the athlete can be predefined by the athlete,” “processes the acceleration data it receives from the accelerometer to provide athletic performance information only when the parameters relating to the environment and/or movement Which are monitored by a global positioning system match the target values”
- Claim 8: “request acceleration data from the accelerometer at intervals”
- Claim 9: “wherein the length of the intervals are dependent on the athletic performance information which is to be provided by the athletic performance monitoring device”
- Claim 10: “request acceleration data from the accelerometer when the global positioning system detects a change in a predefined aspect of an environment of the athlete”
- Claim 11: “request acceleration data from the accelerometer when the global positioning system detects a change in slope”

- Claim 12: “provide athletic performance information depending on the slope, so that athletic performance information associated with different slopes, is provided”
- Claim 13: “wherein the accelerometer is configured such that it can be secured to a garment of an athlete”
- Claim 14: “measuring the acceleration of an athlete using an accelerometer adapted to be worn by the athlete close to the center of gravity of the athlete, to provide acceleration data,” “wirelessly communicating by the accelerometer the acceleration data, relating to the acceleration of the athlete, to a processing system integral in an athlete-worn device being worn by the athlete, wherein the processing system is configured such that, during use, it requests acceleration data from the accelerometer only when a predefined event has occurred.” “processing by the processing system the acceleration data the processing system receives from the accelerometer, to provide athletic performance information”
- Claim 15: “an accelerometer adapted to be worn by an athlete close to the center of gravity of the athlete,” “a user-worn device with a processing system,” “wherein the accelerometer is further configured such that it can wirelessly communicate acceleration data, relating to the acceleration of the athlete, to the processing system, and wherein the processing system is configured to be a master and the accelerometer is configured to be a slave in a master-slave configuration, such that the accelerometer sends acceleration data to the processing system only upon receiving a request from the processing system,” “wherein the processing system is configured such that it can request acceleration data from the accelerometer only when a predefined event has occurred, and such that it can process the acceleration data it receives from the accelerometer to provide athletic performance information”
- Claim 16: “an accelerometer adapted to be worn by an athlete close to the center of gravity

of the athlete,” “a user-worn device with a processing system,” “wherein the accelerometer is further configured such that it can wirelessly communicate acceleration data, relating to the acceleration of the athlete, to the processing system, and wherein the processing system is configured such that it can request acceleration data from the accelerometer only when a predefined event has occurred, and such that it can process the acceleration data it receives from the accelerometer to provide athletic performance information,” “wherein, the processing system is configured to provide athletic performance information depending on the slope, so that athletic performance information associated with different slopes, is provided”

**B. Lack of Enablement/Lack of Written Description Under 35 U.S.C. § 112, ¶ 1**

The asserted claims of the Asserted Patents are further invalid under 35 U.S.C. § 112, ¶ 1 because the specifications do not contain an adequate written description of the subject matter of these claims and would not enable one of skill in the relevant art to make and use the alleged invention.

For a claim to be valid, the specification must contain a written description of the invention. 35 U.S.C. § 112, ¶ 1. To fulfill the written description requirement, it “must clearly allow persons of ordinary skill in the art to recognize that the inventor invented what is claimed.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (citation and internal quotation marks omitted). “[T]he applicant must ‘convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention,’ and demonstrate that by disclosure in the specification of the patent.” *Carnegie Mellon Univ. v. Hoffmann-La Roche Inc.*, 541 F.3d 1115, 1122 (Fed. Cir. 2008) (quoting *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563–64 (Fed. Cir. 1991)).

The specification must also describe “the manner and process of making and using [the invention], in such full, clear, concise, and exact terms as to enable any person skilled in the art

to which it pertains . . . to make and use the” invention. *Ariad*, 598 F.3d at 1343; *see also* 35 U.S.C. § 112 ¶ 1. “The enablement requirement is satisfied when one skilled in the art, after reading the specification, could practice the claimed invention without undue experimentation.” *AK Steel Corp. v. Sollac & Ugine*, 344 F.3d 1234, 1244 (Fed. Cir. 2003) (citation omitted). “[T]he scope of the claims must be less than or equal to the scope of the enablement.” *Nat’l Recovery Tech., Inc. v. Magnetic Separation Sys., Inc.*, 166 F.3d 1190, 1196 (Fed. Cir. 1999).

Each of the asserted claims below are invalid because the specifications fail to provide written description and/or an enabling disclosure of at least the following limitations:

### **’033 Patent**

- Claim 1: “a microcontroller being arranged for reproducing on said electronic display the simulation of a mechanical watch movement comprising a gear train, said simulation being visible so as to indicate the time, said microcontroller being further arranged for synchronizing the displayed time by said displayed mechanical movement with that of said quartz oscillator”
- Claim 2: “and the position of at least one component of said movement can be modified by pressing on the position of said electronic display corresponding to said component”
- Claim 3: “wherein said microcontroller is arranged for displaying the simulation of a movement and wherein the angular position of at least one element of said gear-train can be modified by pressing on said touch sensor”
- Claim 6: “said microcontroller being arranged for modifying the position of at least one of said elements of said movement according to the data from said accelerometer”
- Claim 7: “said microcontroller being arranged for modifying the position of at least one of said elements of said movement according to the data from said accelerometer”
- Claim 8: “the position of said displayed balance and/or tourbillon depending on an output

signal from said accelerometer”

- Claim 9: “the microcontroller being arranged for calculating and displaying a simulation of the oscillations of said displayed regulating organ taking into account the mass of said balance and the rigidity of said returning element, wherein the displayed time depends on said simulation”
- Claim 10: “means for modifying the running of said displayed regulating organ according to the accelerations to which the watch is subjected”
- Claim 12: “means for entering and executing a request for said synchronization by the user”
- Claim 16: “a microcontroller being arranged for reproducing on said electronic display a simulation of a mechanical watch movement comprising a gear train visible so as to indicate the time and for synchronizing the displayed time by said displayed mechanical movement with that of said quartz oscillator”
- Claim 17: “displaying on an electronic display of a simulated mechanical watch movement comprising a gear train and of time indicators so as to simulate a mechanical watch”
- Claim 17: “a step of modifying a position of at least one component of said mechanical movement by detecting displacement of a finger on that component with a touch sensor connected to said display”
- Claim 18: “the angular position of at least one element of the gear train displayed on said display is modified by pressing on said element”
- Claim 18: “the position of at least one element of said movement is modified according to the data from an accelerometer”
- Claim 18: “the position of an oscillating mass displayed on the display depends on an output signal from said accelerometer”

- Claim 18: “the position of a balance and/or tourbillon displayed on said display depends on an output signal from said accelerometer”
- Claim 18: “the oscillations of a regulating organ displayed on said display are simulated taking into account the simulated mass of a simulated balance and the rigidity of a returning element displayed on said display, with the time displayed being dependent on said simulation”
- Claim 18: “the running of said displayed regulating element is modified according to the accelerations to which the watch is subjected”
- Claim 19: “a step of loading new displayable mechanical movements through an input-output interface of the watch”

#### **'922 Patent**

- Claim 1: “wherein one card of said several available cards and occupying the entire digital matrix display is immediately and without further user intervention replaced after the scrolling by a different card of said several available cards that occupies the entire digital matrix display”
- Claim 1: “wherein said processing circuit is further laid out so that the replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display”
- Claim 5: “at least one of said cards makes it possible to calculate and display a simulation of a mechanical watch displaying the time, so as to enable the user to change the mechanical watch displayed by scrolling cards”
- Claim 6: “the processing circuit being laid out for detecting simultaneous contacts on several points of the touch-sensitive glass so as to constitute a multi-touch haptic screen”
- Claim 7: “the processing circuit being laid out for determining the displacement of the

center of gravity of the contact zone of the finger on the touch-sensitive glass”

- Claim 9: “scrolling on a digital matrix display of several available cards so as for said scrolling to stop of itself so as to align an edge of the replacement card with an edge of the matrix display, wherein one card of said several available cards and occupying the entire digital matrix display is replaced after the scrolling, immediately and without further user intervention, by a different card selected between said several available cards and occupying the entire digital matrix display; and wherein the scrolling direction depends only on the direction of said movement so that said replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display”
- Claim 10: “the entering of a touch command for confirming or stopping the scrolling”
- Claim 12: “the determining of the displacement of the center of gravity of the contact zone of the finger on the two-dimensional touch-sensitive glass”
- Claim 14: “the card scrolling speed or amplitude depend on the speed or amplitude of movement of the finger on the two-dimensional touch-sensitive glass”
- Claim 17: “the card scrolling is interrupted by a brief pressure on the two-dimensional touch-sensitive, so as to cause the card best centered on the display at the time of the interruption to be selected and displayed”
- Claim 20: “a plurality of said cards displays a simulation of a virtual mechanical movement”
- Claim 23: “wherein said processing circuit is specifically laid out so as to cause said several available cards to scroll past by displaying the image of said cards one at a on the digital matrix display in order to lastingly replace the initially displayed card with a

replacement card selected within said several available cards, immediately after the scrolling and without further user intervention”

- Claim 23: “wherein said processing circuit is further laid out so that the replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display”
- Claim 24: “wherein said processing circuit is further laid out so that the replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display”

#### **'678 Patent**

- Claim 1: “ wherein the inertial sensor comprises an accelerometer and a processor and/or other processing means,” “wherein the wristwatch comprises a microcontroller controlling a display of indication on a digital matrix display of the wristwatch,” “a touch controller for interpreting touch signal provided by a touch panel underneath a cover glass and for converting said signals into command signal,” “using the accelerometer of the inertial sensor for generating an acceleration signal used for detecting a gesture on the cover glass of said wristwatch, while the microcontroller and the touch controller are in a sleep power mode,” “using the processor and/or other processing means of the inertial sensor for discriminating between gesture and no gesture based on a direction of said acceleration signal and on a slope or frequency of said acceleration signal as measured by said accelerometer being a three dimensional accelerometer,” “using the touch controller for detecting a tap gesture on the cover glass with the touch panel,” “waking up the microcontroller in said wristwatch upon detection of a tap gesture by said touch

controller,” “using said microcontroller for detecting said gesture and for discriminating between gesture and no gesture based at least on signals from the touch panel”

- Claim 4: “determining said frequency and determining that there is no gesture if said frequency is not in a predetermined frequency range compatible with a tap”
- Claim 5: “determining that there is no gesture if said direction is not substantially perpendicular to said cover glass”
- Claim 6: “applying a power supply sufficient for detecting a gesture to only a first subset of said touch areas”
- Claim 8: “partially waking up said touch panel upon detection of a gesture by said accelerometer”
- Claim 9: “waking up only a subset of the complete area of said touch panel upon detection of a gesture by said accelerometer”
- Claim 10: “waking up a microcontroller in said wristwatch upon detection of a gesture by said accelerometer and with said touch panel”
- Claim 11: “said gesture being a tap or a double tap”
- Claim 12: “detecting a wristturn with said accelerometer, and switching said wristwatch from said first power mode to said second power mode when a wristturn has been detected”
- Claim 13: “detecting that the wristwatch remains substantially immobile during a predetermined duration”
- Claim 14: “a touch panel underneath a cover glass of said wristwatch for detecting a gesture on said cover glass,” “an inertial sensor comprising an accelerometer and a processor and/or other processing means, said accelerometer being arranged for generating an acceleration signal and the processor and/or other processing means being

arranged for discriminating between gesture and no gesture based on a direction of said acceleration signal as measured by said accelerometer being a three dimensional accelerometer, and on a slope or frequency of said acceleration signal, while the microcontroller and the touch controller are in a sleep power mode,” “wherein touch controller is commanded so as to be switched to said second power mode upon gesture detection by said inertial sensor and for detecting a tap gesture on the cover glass with the touch panel,” “wherein the microcontroller is arranged for controlling a display of indication on the display and commanded so as to be switched to said second power mode upon a tap gesture detection by said touch controller,”

- Claim 15: “wherein said touch panel comprises a plurality of touch areas and powering means arranged for powering only a first subset of said touch area upon detection of a gesture by said accelerometer, and for powering a larger subset in said second power mode”

#### **'085 Patent**

- Claim 1: “switching said wristwatch from said first power mode to said second power mode when a wristturn has been detected,” “detecting that the orientation of the wristwatch is held within a first range for a defined time,” “detecting that the orientation is in a second range different from said first range,” “detecting that the wristwatch remains substantially immobile during a predetermined duration,” “that a duration between the starting position and the final position is in a predefined range”
- Claim 2: “said first range is an angle range from 25° to 155° relatively to the horizontal”
- Claim 3: “said second range is an angle range from -25° to -75° relatively to the horizontal”
- Claim 4: “detecting that an orientation of the wristwatch is held in a range from -25° to

–60° relatively to the horizontal during said predetermined duration”

- Claim 5: “wherein said defined time is 50 ms”
- Claim 6: “in response to a detection that the orientation of the wristwatch is held within this second range for a defined time, registering that an orientation of the wristwatch is in the final position,” “said duration between the starting position and the final position is provided by measuring a duration between the starting position and the registering of the final position”
- Claim 7: “wherein said defined time is 50 ms”
- Claim 8: “detecting that a duration between the wristwatch being held in the first range and the wristwatch being held in the second range is in a predefined third range”
- Claim 9: “said step of detecting that the orientation of the wristwatch is then in a second range comprises detecting that a display of the wristwatch is oriented towards a face of the user”
- Claim 10: “in response of a detection of the orientation of the wristwatch is in the second range, checking if the orientation of the wristwatch was in the first range during a previous step”

### **'018 Patent**

- Claim 1: “supplying at least one sequence of acceleration data in at least a vertical direction whilst the runner travels a distance on a running course,” “calculating, during or at the end of the run, biomechanical parameters of the stride of said runner, on the basis of said acceleration data, of a distance measured by said GPS receiver and/or by said accelerometer, and of a duration counted by said chronograph,” “vertical oscillation of a center of gravity of said runner,” “a distance the center of gravity lowers and a distance the center of gravity elevates in a stride,” “a sum of the lowering and of the elevation of

the center of gravity,” “determining an anteroposterior direction during the run of the runner,” “calculating, during or at the end of the run, at least some of the biomechanical parameters of the stride of said runner, also on the basis of said acceleration data in said anteroposterior direction”

- Claim 3: “the center of mass being located at a place where the device and/or the accelerometer is fastened”
- Claim 4: “wherein said lowering of said center of gravity is obtained as a function of a maximum bearing force, of a contact time and of a mass of the runner”
- Claim 5: “wherein said elevation of said centre of gravity is obtained as a function of a vertical takeoff speed”
- Claim 6: “wherein said biomechanical parameters include a stiffness, calculated as a function of a maximum bearing force and of said lowering”
- Claim 7: “wherein said biomechanical parameters include a stride regularity index, calculated on a basis of the reactivity dispersion determined by means of said acceleration data”
- Claim 8: “wherein said biomechanical parameters include a fatigue level indicator calculated on the basis of said regularity index”
- Claim 9: “wherein said biomechanical parameters include the asymmetry between at least one parameter of a left leg and at least one corresponding parameter of a right leg”
- Claim 10: “wherein said biomechanical parameters include an injury risk indicator calculated on the basis of said asymmetry”
- Claim 11: “wherein said biomechanical parameters include a takeoff angle of the centre of gravity at a moment when the foot leaves the ground, obtained from an average speed and a vertical speed at a moment of takeoff”

- Claim 12: “wherein said average speed is calculated on the basis of said travelled distance and said duration counted by said chronograph, whilst said vertical speed at the moment of takeoff is obtained by integration of said acceleration data”
- Claim 13: “a landing angle of a leg on the ground”
- Claim 14: “a distance travelled by the runner's centre of gravity during a duration when the foot is in contact with the ground”
- Claim 15: “wherein a sequence of acceleration data in at least a lateral direction is measured by said accelerometer and processed separately from said sequence of acceleration data in the vertical direction in order to calculate at least some of said parameters”
- Claim 16: “wherein the vertical direction is determined on the basis of the acceleration data when the runner is at a standstill”
- Claim 17: “wherein said anteroposterior direction is determined by determining a spatial direction in which displacement is greatest”
- Claim 18: “wherein a transformation of a frame of reference is performed when the axes of said accelerometer do not coincide with a vertical respectively anteroposterior axes”
- Claim 19: “a variation of a stiffness of the leg muscles”
- Claim 20: “calculating said distance travelled by the runner's center of gravity during a duration when the foot is in contact with the ground, on the basis of the speed on said anteroposterior direction”

#### **’457 Patent**

- Claim 1: “supplying at least one sequence of acceleration data in at least a vertical direction whilst the runner travels a distance on a running course,” “calculating, during or at the end of the run, biomechanical parameters of the stride of said runner on the basis

of said acceleration data, of said distance and of a duration counted by said chronograph, and for displaying said parameters on said display, wherein the biomechanical parameters of the stride comprises the vertical oscillation of the center of gravity of said runner between a lowest position and a highest vertical position of the center of gravity of said runner, and include the distance the center of gravity lowers and/or the distance the center of gravity elevates in a stride, and/or sum of the lowering of the center of gravity of said runner from a first highest vertical position to a second lowest vertical position and of the elevation of the center of gravity of said runner from the second lowest vertical position to the first highest vertical position, and wherein the biomechanical parameters are calculated at each stride, and wherein the digital processor is further programmed for calculating an average, per stride, of at least some calculated biomechanical parameters of the stride, wherein said lowering of said center of gravity is obtained as a function of maximum bearing force, of contact time and of the runner's mass, wherein the maximum bearing force is multiplied by the square of the contact time and divided by the runner's mass and wherein the function includes at least a constant”

- Claim 2: “wherein said elevation of said center of gravity is obtained as a function of vertical takeoff speed”
- Claim 3: “wherein said biomechanical parameters include a stiffness, calculated as a function of said maximum bearing force and of said lowering”
- Claim 4: “wherein said biomechanical parameters include a stride regularity index, calculated on the basis of the reactivity dispersion determined by means of said acceleration data”
- Claim 5: “wherein said biomechanical parameters include a fatigue level indicator on the basis of said regularity index”

- Claim 6: “wherein said biomechanical parameters include the asymmetry between at least one parameter of the left leg and at least one corresponding parameter of the right leg”
- Claim 7: “wherein said biomechanical parameters include an injury risk indicator calculated on the basis of said asymmetry”
- Claim 8: “wherein said biomechanical parameters include a takeoff angle of the center of gravity at the moment when the foot leaves the ground, obtained from an average speed and a vertical speed at the moment of takeoff”
- Claim 9: “wherein said average speed is calculated on the basis of said travelled distance and said duration counted by said chronograph, whilst said vertical speed at the moment of takeoff is obtained by integration of said acceleration data”
- Claim 10: “a landing angle of the leg on the ground”
- Claim 11: “the distance travelled by the runner's center of gravity during the duration when the foot is in contact with the ground”
- Claim 12: “wherein a sequence of acceleration data in at least the anteroposterior direction is measured by said accelerometer and processed separately from said sequence of acceleration data in the vertical direction in order to calculate at least some of said parameters”
- Claim 13: “wherein a sequence of acceleration data in at least the lateral direction is measured by said accelerometer and processed separately from said sequence of acceleration data in the vertical direction in order to calculate at least some of said parameters”
- Claim 14: “wherein an anteroposterior direction is determined by determining the spatial direction in which the displacement is largest”
- Claim 15: “a self-sufficient electric power source,” “a triaxial accelerometer capable of

supplying at least one sequence of acceleration data in at least the vertical direction whilst the runner travels a distance on a running course,” “calculating, during or at the end of a run, biomechanical parameters of the stride of said runner on the basis of acceleration data, of distance and of a duration counted by said chronograph, and wherein the biomechanical parameters of the stride comprise the vertical oscillation of the center of gravity of said runner between a first lowest vertical position and a second highest vertical position, and include the distance the center of gravity lowers and/or the distance the center of gravity elevates in a stride, and/or sum of the lowering of the center of gravity of said runner from the second highest vertical position to the first lowest vertical position and of the elevation of the center of gravity of said runner from the first lowest vertical position to the second highest vertical position,” “calculating an average, per stride, of at least some calculated biomechanical parameters of the stride,” “obtaining said lowering of said center of gravity as a function of maximum bearing force, of contact time and of the runner's mass, wherein the maximum bearing force is multiplied by the square of the contact time and divided by the runner's mass and wherein the function includes at least a constant”

- Claim 16: “a self-sufficient electric power source,” “a digital processor programmed for calculating, during or at the end of the run, biomechanical parameters of the stride of said runner on the basis of said acceleration data, of said distance and of a duration counted by said chronograph, and for displaying said parameters on said display, wherein the biomechanical parameters of the stride comprises a stiffness parameter based on the maximum force exerted by the ground on the foot and on the lowering of the center of gravity when this maximum force is exerted, and wherein the biomechanical parameters are calculated at each stride, wherein said lowering of said center of gravity is obtained

as a function of maximum bearing force, of contact time and of the runner's mass, wherein the maximum bearing force is multiplied by the square of the contact time and divided by the runner's mass and wherein the function includes at least a constant, and wherein the digital processor is further programmed for calculating an average, per stride, of at least some calculated biomechanical parameters of the stride”

- Claim 17: “a self-sufficient electric power source,” “a triaxial accelerometer capable of supplying at least one sequence of acceleration data in at least the vertical direction whilst the runner travels a distance on a running course,” “calculating, during or at the end of a run, biomechanical parameters of the stride of said runner on the basis of acceleration data, of distance and of a duration counted by said chronograph, and wherein the biomechanical parameters of the stride comprise the vertical oscillation of the center of gravity of said runner between a first lowest vertical position and a second highest vertical position, and include the distance the center of gravity lowers and/or the distance the center of gravity elevates in a stride, and/or sum of the lowering of the center of gravity of said runner from the second highest vertical position to the first lowest vertical position and of the elevation of the center of gravity of said runner from the first lowest vertical position to the second highest vertical position,” “calculating an average, per stride, of at least some calculated biomechanical parameters of the stride,” “obtaining said lowering of said center of gravity as a function of maximum bearing force, of contact time and of the runner's mass, wherein the maximum bearing force is multiplied by the square of the contact time and divided by the runner's mass and wherein the function includes at least a constant”
- Claim 18: “wherein said function of maximum bearing force, of contact time and of the runner's mass is defined by the formula

$$A_f(F_{\max}, T_c, M) = |-(F_{\max} * T_c^2)/(M * \pi^2) + (G * T_c^2)/8|$$

wherein Fmax is the maximum bearing force, T<sub>c</sub> the contact time, M the runner's mass, G the gravity acceleration constant”

- Claim 19: “wherein said function of maximum bearing force, of contact time and of the runner's mass is defined by the formula

$$A_f(F_{\max}, T_c, M) = |-(F_{\max} * T_c^2)/(M * \pi^2) + (G * T_c^2)/8|$$

wherein Fmax is the maximum bearing force, T<sub>c</sub> the contact time, M the runner's mass, G the gravity acceleration constant”

- Claim 20: “wherein said function of maximum bearing force, of contact time and of the runner's mass is defined by the formula

$$A_f(F_{\max}, T_c, M) = |-(F_{\max} * T_c^2)/(M * \pi^2) + (G * T_c^2)/8|$$

wherein Fmax is the maximum bearing force, T<sub>c</sub> the contact time, M the runner's mass, G the gravity acceleration constant”

- Claim 21: “wherein said function of maximum bearing force, of contact time and of the runner's mass is defined by the formula

$$A_f(F_{\max}, T_c, M) = |-(F_{\max} * T_c^2)/(M * \pi^2) + (G * T_c^2)/8|$$

wherein Fmax is the maximum bearing force, T<sub>c</sub> the contact time, M the runner's mass, G the gravity acceleration constant”

### **'134 Patent**

- Claim 1: “an accelerometer adapted to be worn by an athlete close to the center of gravity of the athlete,” “a user-worn device with a processing system integral thereto such that the processing system can be worn by the athlete,” “wherein the accelerometer is further configured such that it can wirelessly communicate acceleration data, relating to the acceleration of the athlete, to the processing system, and wherein the processing system

is configured such that, during use, it requests acceleration data from the accelerometer only when a predefined event has occurred, and such that it can process the acceleration data it receives from the accelerometer to provide athletic performance information”

- Claim 2: “wherein at least some of said predefined event depends on the output of said global positioning system”
- Claim 3: “wherein at least some of said predefined event depends on the output of said altimeter”
- Claim 4: “electronic clock module,” “an inactive event wherein the inactive event is an event defined by when none of one or more selected predefined events occurring”
- Claim 5: “contact time; duration of stride; distance covered in a stride; speed; stride length; stride frequency; vertical displacement of the center of gravity; take-off angle; reactivity; stiffness; efficiency; force contact; distance contact; landing angle; regularity”
- Claim 6: “monitor a plurality of parameters relating to an environment and/or movement of the athlete,” “the geographical position of the user, the heart rate of the athlete, speed of the user, distance an athlete has travelled, slope of the terrain on which the athlete is travelling, direction in which the athlete is travelling”
- Claim 7: “target values for one or more parameters relating to the environment and/or movement of the athlete can be predefined by the athlete,” “processes the acceleration data it receives from the accelerometer to provide athletic performance information only when the parameters relating to the environment and/or movement Which are monitored by a global positioning system match the target values”
- Claim 8: “request acceleration data from the accelerometer at intervals”
- Claim 9: “wherein the length of the intervals are dependent on the athletic performance information which is to be provided by the athletic performance monitoring device”

- Claim 10: “request acceleration data from the accelerometer when the global positioning system detects a change in a predefined aspect of an environment of the athlete”
- Claim 11: “request acceleration data from the accelerometer when the global positioning system detects a change in slope”
- Claim 12: “provide athletic performance information depending on the slope, so that athletic performance information associated with different slopes, is provided”
- Claim 13: “wherein the accelerometer is configured such that it can be secured to a garment of an athlete”
- Claim 14: “measuring the acceleration of an athlete using an accelerometer adapted to be worn by the athlete close to the center of gravity of the athlete, to provide acceleration data,” “wirelessly communicating by the accelerometer the acceleration data, relating to the acceleration of the athlete, to a processing system integral in an athlete-worn device being worn by the athlete, wherein the processing system is configured such that, during use, it requests acceleration data from the accelerometer only when a predefined event has occurred.” “processing by the processing system the acceleration data the processing system receives from the accelerometer, to provide athletic performance information”
- Claim 15: “an accelerometer adapted to be worn by an athlete close to the center of gravity of the athlete,” “a user-worn device with a processing system,” “wherein the accelerometer is further configured such that it can wirelessly communicate acceleration data, relating to the acceleration of the athlete, to the processing system, and wherein the processing system is configured to be a master and the accelerometer is configured to be a slave in a master-slave configuration, such that the accelerometer sends acceleration data to the processing system only upon receiving a request from the processing system,” “wherein the processing system is configured such that it can request acceleration data

from the accelerometer only when a predefined event has occurred, and such that it can process the acceleration data it receives from the accelerometer to provide athletic performance information”

- Claim 16: “an accelerometer adapted to be worn by an athlete close to the center of gravity of the athlete,” “a user-worn device with a processing system,” “wherein the accelerometer is further configured such that it can wirelessly communicate acceleration data, relating to the acceleration of the athlete, to the processing system, and wherein the processing system is configured such that it can request acceleration data from the accelerometer only when a predefined event has occurred, and such that it can process the acceleration data it receives from the accelerometer to provide athletic performance information,” “wherein, the processing system is configured to provide athletic performance information depending on the slope, so that athletic performance information associated with different slopes, is provided”

## **V. SUBJECT MATTER INELIGIBILITY**

Defendant asserts that some or all asserted patents are directed to ineligible subject matter under 35 U.S.C. § 101. To be patentable subject matter under § 101, a claim must be directed to one of four eligible subject matter categories: “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. “Claims that fall within one of the four subject matter categories may nevertheless be ineligible if they encompass laws of nature, physical phenomena, or abstract ideas.” *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980). The Supreme Court established a two-step test for deciding the subject matter eligibility of claims under § 101. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014). First, the claims must be analyzed to determine whether they are drawn to one of the statutory exceptions. *Id.* Claims that invoke generic computer components instead of reciting specific improvements in computer capabilities

are abstract under this first step. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016). Second, the elements of the claims must be viewed both individually and as an ordered combination to see if there is an “inventive concept.” *Id.* The mere fact that a claim recites or implies that an abstract idea is implemented using a general-purpose computer does not supply an inventive concept necessary to satisfy § 101. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016); *Alice*, 134 S. Ct. at 2357-59.

At present, including in view of current legal precedents regarding patent eligibility under 35 U.S.C. § 101, Defendant contends that at least the following Asserted claims—at least as apparently construed by Plaintiff in its Infringement Contentions—are directed to ineligible subject matter under 35 U.S.C. § 101 and applicable case law. To the extent any elements of the Asserted Patents (in either the independent or dependent claims) are not fully encompassed within the abstract idea, those elements are well understood, routine, and/or conventional as demonstrated in the claim charts attached as Exhibits A-G, including relevant prior art patents, publications identified previously.

Pursuant to the Court’s Standing Order Regarding Subject Matter Eligibility Contentions (“Order Regarding Eligibility”), Defendant provides the following disclosure. This identification is preliminary, and Defendant reserves the right to supplement its contentions, including to modify the abstract idea to which the Asserted Patents are directed and provide additional evidence that the claimed concepts are well understood, routine, and/or conventional.

#### **A. ’033 Patent**

In addition to the preceding invalidity contentions, Defendant further contends that each of the asserted claims of the ’033 Patent is drawn to subject matter that is not patentable under 35 U.S.C. § 101. The ’033 Patent’s asserted claims are invalid under 35 U.S.C. § 101 for failure to recite patent-eligible subject matter. Specifically, all asserted claims of the ’033 patent are

fatally abstract under the U.S. Supreme Court’s decision in *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208 (2014) and progeny. The abstract ideas presented in the claims are generally directed to the abstract concept of displaying the inner workings of a mechanical watch movement on a display of a wristwatch. Alternatively, Claims 6-8, 10, and 18 are also directed to the abstract idea of determining the position of an object based on the accelerations to which the object is subjected. Alternatively, Claims 2-3 and 15-19 are also directed to the abstract idea of using a touchscreen to interface with an electronic wristwatch. Under Alice Step 1, those ideas are abstract, as they relate to watches with an electronic display to display time. *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1314 (Fed. Cir. 2016); *Silver State Intellectual Techs. v. Facebook Inc.*, 2018 WL 1729444, at \*4-\*5 (N.D. Cal. 2018); *VeriPath, Inc. v. Didomi*, 2020 WL 1503687, at \*3-\*4 (S.D.N.Y. 2020); *Kaleasy Tech LLC v. Slack Techs., Inc.*, 2020 WL 4260605, at \*4-\*6 (D. Del. 2020); *Grecia v. Bank of New York Mellon Corp.*, 2020 WL 1979276, at \*4-\*9 (S.D.N.Y. 2020); *Tele-Publishing, Inc. v. Facebook, Inc.*, 2017 WL 1959218, at \*5-\*10 (D. Mass. 2017); *Atos, LLC v. Allstate Ins. Co.*, 2021 WL 6063963, at \*9-\*12 (N.D. Ill. 2021); *ChargePoint, Inc. v. SemaConnect, Inc.*, 2018 WL 1471685, at \*8-\*11 (D. Md. 2018), *aff’d*, 920 F.3d 759, 768-75 (Fed. Cir. 2019); *UbiComm, LLC v. Zappos IP, Inc.*, 2013 WL 6019203, at \*3-\*6 (D. Del. 2013); *Ericsson Inc. v. TCL Commc’n Tech. Holdings Ltd.*, 955 F.3d 1317, 1326-31 (Fed. Cir. 2020); *Broadcom Corp. v. Netflix Inc.*, 2022 WL 1105073, at \*4-\*6 (N.D. Cal. 2022); *CG Tech. Dev., LLC v. Fanduel, Inc.*, 2020 WL 1064863, at \*3-\*5 (D. Del. 2020); *CardioNet, LLC v. Scottcare Corp.*, 2019 WL 3072702, at \*7-\*10, \*19-\*21 (E.D. Pa. 2019); *RingCentral, Inc. v. Dialpad, Inc.*, 2019 WL 1102986, at \*3-\*6 (N.D. Cal. 2019); *Umbanet, Inc. v. Epsilon Data Mgmt., LLC*, 2017 WL 1398274, at \*4-\*5 (E.D. Tex. 2017); *Protegrity USA, Inc. v. Netskope, Inc.*, 2015 WL 6126599, at \*6-\*8 (N.D. Cal. 2015); *Mantissa Corp. v. Ondot Sys., Inc.*, 2017 WL 3437773, at \*7-\*19 (S.D. Tex. 2017); *Beteiro, LLC v. BetMGM, LLC*, 2022 WL 4092946, at \*6-\*10 (D.N.J. 2022); *Mira Advanced Tech. Sys., Inc. v. Google LLC*, 2022 WL

3925235, at \*4-\*6 (S.D.N.Y. 2022); *Liquet Techs., Inc. v. Tile, Inc.*, 2021 WL 4198521, at \*4-\*7 (N.D. Cal. 2021); *RDPA, LLC v. Geopath, Inc.*, 2021 WL 2440700, at \*12-\*17 (S.D. N.Y. 2021); *B# on Demand LLC v. Spotify Tech. S.A.*, 2020 WL 5369185, at \*8-\*14 (D. Del. 2020); *ClearDoc, Inc. v. RiversideFM, Inc.*, 2022 WL 3355960, at \*3-\*5 (D. Del. 2022); *DigiMedia Tech, LLC v. ViacomCBS Inc.*, 2022 WL 836788 at \*5-\*8 (S.D.N.Y. 2022). A claim is drawn to an abstract idea when “humans have always performed [the claimed] functions.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, NA*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Limiting the invention to a particular technological environment, e.g. generic computer hardware, “do[es] not render an otherwise abstract concept any less abstract.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed Cir. 2017). Furthermore, because the patent relates to watches with an electronic display to display time, it is likewise abstract, as “information is . . . an intangible.” *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 6290, 6293 (Fed. Cir. 2016).

Moreover, under Alice Step 2, the '033 Patent does not contain any inventive concept. The '033 Patent's asserted claims employ well-known components (e.g., electronic watches with a quartz oscillator, an electronic display, a crown stem, an organ, and escapement, and an oscillator) or functionality (e.g., a watch able to display time in digital or mechanical fashion and a system for downloading watch faces displayed on a device), as reflected in Defendant's invalidity contentions under 35 U.S.C. §§ 102-103, which is not enough to impart patent-eligibility to an abstract idea. *See, e.g., Alice*, 573 U.S. at 225 (holding that limitations describing “‘well-understood, routine, conventional activit[ies]’ previously known to the industry” were insufficient to supply an inventive concept (quoting *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 73 (2012))).

## **B. '922 Patent**

In addition to the preceding invalidity contentions, Defendant further contends that each of the asserted claims of the '922 Patent is drawn to subject matter that is not patentable under 35 U.S.C. § 101. The '922 Patent's asserted claims are invalid under 35 U.S.C. § 101 for failure to recite patent-eligible subject matter. Specifically, all asserted claims of the '922 patent are fatally abstract under the U.S. Supreme Court's decision in *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014) and progeny. The abstract ideas presented in the claims are generally directed to the abstract idea of using a touchscreen to interface with an electronic wristwatch. Under Alice Step 1, those ideas are abstract, as they relate to watches with a touch sensitive display screen. See *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1314 (Fed. Cir. 2016); *Silver State Intellectual Techs. v. Facebook Inc.*, 2018 WL 1729444, at \*4-\*5 (N.D. Cal. 2018); *VeriPath, Inc. v. Didomi*, 2020 WL 1503687, at \*3-\*4 (S.D.N.Y. 2020); *Kaleasy Tech LLC v. Slack Techs., Inc.*, 2020 WL 4260605, at \*4-\*6 (D. Del. 2020); *Grecia v. Bank of New York Mellon Corp.*, 2020 WL 1979276, at \*4-\*9 (S.D.N.Y. 2020); *Tele-Publishing, Inc. v. Facebook, Inc.*, 2017 WL 1959218, at \*5-\*10 (D. Mass. 2017); *Atos, LLC v. Allstate Ins. Co.*, 2021 WL 6063963, at \*9-\*12 (N.D. Ill. 2021); *ChargePoint, Inc. v. SemaConnect, Inc.*, 2018 WL 1471685, at \*8-\*11 (D. Md. 2018), *aff'd*, 920 F.3d 759, 768-75 (Fed. Cir. 2019); *UbiComm, LLC v. Zappos IP, Inc.*, 2013 WL 6019203, at \*3-\*6 (D. Del. 2013); *Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd.*, 955 F.3d 1317, 1326-31 (Fed. Cir. 2020); *Broadcom Corp. v. Netflix Inc.*, 2022 WL 1105073, at \*4-\*6 (N.D. Cal. 2022); *CG Tech. Dev., LLC v. Fanduel, Inc.*, 2020 WL 1064863, at \*3-\*5 (D. Del. 2020); *CardioNet, LLC v. Scottcare Corp.*, 2019 WL 3072702, at \*7-\*10, \*19-\*21 (E.D. Pa. 2019); *RingCentral, Inc. v. Dialpad, Inc.*, 2019 WL 1102986, at \*3-\*6 (N.D. Cal. 2019); *Umbanet, Inc. v. Epsilon Data Mgmt., LLC*, 2017 WL 1398274, at \*4-\*5 (E.D. Tex. 2017); *Protegrity USA, Inc. v. Netskope, Inc.*, 2015 WL 6126599, at \*6-\*8 (N.D. Cal. 2015); *Mantissa Corp. v. Ondot Sys., Inc.*, 2017 WL 3437773, at \*7-\*19 (S.D. Tex. 2017); *Beteiro, LLC v. BetMGM, LLC*, 2022 WL 4092946, at \*6-\*10 (D.N.J. 2022); *Mira Advanced Tech. Sys., Inc.*

*v. Google LLC*, 2022 WL 3925235, at \*4-\*6 (S.D.N.Y. 2022); *Liquet Techs., Inc. v. Tile, Inc.*, 2021 WL 4198521, at \*4-\*7 (N.D. Cal. 2021); *RDPA, LLC v. Geopath, Inc.*, 2021 WL 2440700, at \*12-\*17 (S.D. N.Y. 2021); *B# on Demand LLC v. Spotify Tech. S.A.*, 2020 WL 5369185, at \*8-\*14 (D. Del. 2020); *ClearDoc, Inc. v. RiversideFM, Inc.*, 2022 WL 3355960, at \*3-\*5 (D. Del. 2022); *DigiMedia Tech, LLC v. ViacomCBS Inc.*, 2022 WL 836788 at \*5-\*8 (S.D.N.Y. 2022). A claim is drawn to an abstract idea when “humans have always performed [the claimed] functions.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, NA*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Limiting the invention to a particular technological environment, e.g. generic computer hardware, “do[es] not render an otherwise abstract concept any less abstract.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed Cir. 2017). Furthermore, because the patent relates to watches with a touch sensitive display screen, it is likewise abstract, as “information is . . . an intangible.” *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 6290, 6293 (Fed. Cir. 2016).

Moreover, under Alice Step 2, the '922 Patent does not contain any inventive concept. The '033 Patent's asserted claims employ well-known components (e.g., wristwatches with a matrix display, wristwatches with a sheet of touch-sensitive glass, a watch with predefined haptic zones, a watch with haptic control, watches that display time in numeric and/or analog fashion, watch with touch screen sensors, a portable device with a touch screen, a watch with a one-dimensional touch screen) or functionality (e.g., detecting movements on an touch screen, a watch with haptic control, watches that display time in numeric and/or analog fashion), as reflected in Defendant's invalidity contentions under 35 U.S.C. §§ 102-103, which is not enough to impart patent-eligibility to an abstract idea. *See, e.g., Alice*, 573 U.S. at 225 (holding that limitations describing “‘well-understood, routine, conventional activit[ies]’ previously known to the industry” were insufficient to supply an inventive concept (quoting *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 73 (2012))).

### C. '018 Patent

In addition to the preceding invalidity contentions, Defendant further contends that each of the asserted claims of the '018 Patent is drawn to subject matter that is not patentable under 35 U.S.C. § 101. The '018 Patent's asserted claims are invalid under 35 U.S.C. § 101 for failure to recite patent-eligible subject matter. Specifically, all asserted claims of the '018 patent are fatally abstract under the U.S. Supreme Court's decision in *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014) and progeny. The abstract ideas presented in the claims are generally directed to the abstract concept (e.g., mental process) of measuring and/or calculating biomechanical parameters of a stride in running. Under Alice Step 1, those ideas are abstract, as they relate to accelerometers to monitor the athletic performance, such as biomechanical parameters of a stride in running. See *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1314 (Fed. Cir. 2016); *Silver State Intellectual Techs. v. Facebook Inc.*, 2018 WL 1729444, at \*4-\*5 (N.D. Cal. 2018); *VeriPath, Inc. v. Didomi*, 2020 WL 1503687, at \*3-\*4 (S.D.N.Y. 2020); *Kaleasy Tech LLC v. Slack Techs., Inc.*, 2020 WL 4260605, at \*4-\*6 (D. Del. 2020); *Grecia v. Bank of New York Mellon Corp.*, 2020 WL 1979276, at \*4-\*9 (S.D.N.Y. 2020); *Tele-Publishing, Inc. v. Facebook, Inc.*, 2017 WL 1959218, at \*5-\*10 (D. Mass. 2017); *Atos, LLC v. Allstate Ins. Co.*, 2021 WL 6063963, at \*9-\*12 (N.D. Ill. 2021); *ChargePoint, Inc. v. SemaConnect, Inc.*, 2018 WL 1471685, at \*8-\*11 (D. Md. 2018), *aff'd*, 920 F.3d 759, 768-75 (Fed. Cir. 2019); *UbiComm, LLC v. Zappos IP, Inc.*, 2013 WL 6019203, at \*3-\*6 (D. Del. 2013); *Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd.*, 955 F.3d 1317, 1326-31 (Fed. Cir. 2020); *Broadcom Corp. v. Netflix Inc.*, 2022 WL 1105073, at \*4-\*6 (N.D. Cal. 2022); *CG Tech. Dev., LLC v. Fanduel, Inc.*, 2020 WL 1064863, at \*3-\*5 (D. Del. 2020); *CardioNet, LLC v. Scottcare Corp.*, 2019 WL 3072702, at \*7-\*10, \*19-\*21 (E.D. Pa. 2019); *RingCentral, Inc. v. Dialpad, Inc.*, 2019 WL 1102986, at \*3-\*6 (N.D. Cal. 2019); *Umbanet, Inc. v. Epsilon Data Mgmt., LLC*, 2017 WL 1398274, at \*4-\*5 (E.D. Tex. 2017); *Protegrity USA, Inc. v. Netskope, Inc.*, 2015 WL 6126599, at \*6-\*8 (N.D. Cal.

2015); *Mantissa Corp. v. Ondot Sys., Inc.*, 2017 WL 3437773, at \*7-\*19 (S.D. Tex. 2017); *Beteiro, LLC v. BetMGM, LLC*, 2022 WL 4092946, at \*6-\*10 (D.N.J. 2022); *Mira Advanced Tech. Sys., Inc. v. Google LLC*, 2022 WL 3925235, at \*4-\*6 (S.D.N.Y. 2022); *Linquet Techs., Inc. v. Tile, Inc.*, 2021 WL 4198521, at \*4- \*7 (N.D. Cal. 2021); *RDPA, LLC v. Geopath, Inc.*, 2021 WL 2440700, at \*12-\*17 (S.D. N.Y. 2021); *B# on Demand LLC v. Spotify Tech. S.A.*, 2020 WL 5369185, at \*8-\*14 (D. Del. 2020); *ClearDoc, Inc. v. RiversideFM, Inc.*, 2022 WL 3355960, at \*3-\*5 (D. Del. 2022); *DigiMedia Tech, LLC v. ViacomCBS Inc.*, 2022 WL 836788 at \*5-\*8 (S.D.N.Y. 2022). A claim is drawn to an abstract idea when “humans have always performed [the claimed] functions.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, NA*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Limiting the invention to a particular technological environment, *e.g.* generic computer hardware, “do[es] not render an otherwise abstract concept any less abstract.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed Cir. 2017). Furthermore, because the patent relates to accelerometers to monitor the athletic performance, it is likewise abstract, as “information is . . . an intangible.” *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 6290, 6293 (Fed. Cir. 2016).

Moreover, under Alice Step 2, the '018 Patent does not contain any inventive concept. The '018 Patent's asserted claims employ well-known components (*e.g.*, a system with an accelerometer, a GPS receiver, a chronograph, a digital processor, etc.) or functionality (*e.g.*, measuring and/or calculating biomechanical parameters of a stride in running), as reflected in Defendant's invalidity contentions under 35 U.S.C. §§ 102-103, which is not enough to impart patent-eligibility to an abstract idea. *See, e.g., Alice*, 573 U.S. at 225 (holding that limitations describing “‘well-understood, routine, conventional activit[ies]’ previously known to the industry” were insufficient to supply an inventive concept (quoting *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 73 (2012))).

#### **D. '457 Patent**

In addition to the preceding invalidity contentions, Defendant further contends that each of the asserted claims of the '457 Patent is drawn to subject matter that is not patentable under 35 U.S.C. § 101. The '457 Patent's asserted claims are invalid under 35 U.S.C. § 101 for failure to recite patent-eligible subject matter. Specifically, all asserted claims of the '457 patent are fatally abstract under the U.S. Supreme Court's decision in *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014) and progeny. The abstract ideas presented in the claims are generally directed to the abstract concept (e.g., mental process) of measuring and/or calculating biomechanical parameters of a stride in running. Under Alice Step 1, those ideas are abstract, as they relate to accelerometers to monitor the athletic performance, such as biomechanical parameters of a stride in running. *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1314 (Fed. Cir. 2016); *Silver State Intellectual Techs. v. Facebook Inc.*, 2018 WL 1729444, at \*4-\*5 (N.D. Cal. 2018); *VeriPath, Inc. v. Didomi*, 2020 WL 1503687, at \*3-\*4 (S.D.N.Y. 2020); *Kaleasy Tech LLC v. Slack Techs., Inc.*, 2020 WL 4260605, at \*4-\*6 (D. Del. 2020); *Grecia v. Bank of New York Mellon Corp.*, 2020 WL 1979276, at \*4-\*9 (S.D.N.Y. 2020); *Tele-Publishing, Inc. v. Facebook, Inc.*, 2017 WL 1959218, at \*5-\*10 (D. Mass. 2017); *Atos, LLC v. Allstate Ins. Co.*, 2021 WL 6063963, at \*9-\*12 (N.D. Ill. 2021); *ChargePoint, Inc. v. SemaConnect, Inc.*, 2018 WL 1471685, at \*8-\*11 (D. Md. 2018), *aff'd*, 920 F.3d 759, 768-75 (Fed. Cir. 2019); *UbiComm, LLC v. Zappos IP, Inc.*, 2013 WL 6019203, at \*3-\*6 (D. Del. 2013); *Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd.*, 955 F.3d 1317, 1326-31 (Fed. Cir. 2020); *Broadcom Corp. v. Netflix Inc.*, 2022 WL 1105073, at \*4-\*6 (N.D. Cal. 2022); *CG Tech. Dev., LLC v. Fanduel, Inc.*, 2020 WL 1064863, at \*3-\*5 (D. Del. 2020); *CardioNet, LLC v. Scottcare Corp.*, 2019 WL 3072702, at \*7-\*10, \*19-\*21 (E.D. Pa. 2019); *RingCentral, Inc. v. Dialpad, Inc.*, 2019 WL 1102986, at \*3-\*6 (N.D. Cal. 2019); *Umbanet, Inc. v. Epsilon Data Mgmt., LLC*, 2017 WL 1398274, at \*4-\*5 (E.D. Tex. 2017); *Protegrity USA, Inc. v. Netskope, Inc.*, 2015 WL 6126599, at \*6-\*8 (N.D. Cal.

2015); *Mantissa Corp. v. Ondot Sys., Inc.*, 2017 WL 3437773, at \*7-\*19 (S.D. Tex. 2017); *Beteiro, LLC v. BetMGM, LLC*, 2022 WL 4092946, at \*6-\*10 (D.N.J. 2022); *Mira Advanced Tech. Sys., Inc. v. Google LLC*, 2022 WL 3925235, at \*4-\*6 (S.D.N.Y. 2022); *Linquet Techs., Inc. v. Tile, Inc.*, 2021 WL 4198521, at \*4- \*7 (N.D. Cal. 2021); *RDPA, LLC v. Geopath, Inc.*, 2021 WL 2440700, at \*12-\*17 (S.D. N.Y. 2021); *B# on Demand LLC v. Spotify Tech. S.A.*, 2020 WL 5369185, at \*8-\*14 (D. Del. 2020); *ClearDoc, Inc. v. RiversideFM, Inc.*, 2022 WL 3355960, at \*3-\*5 (D. Del. 2022); *DigiMedia Tech, LLC v. ViacomCBS Inc.*, 2022 WL 836788 at \*5-\*8 (S.D.N.Y. 2022). A claim is drawn to an abstract idea when “humans have always performed [the claimed] functions.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, NA*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Limiting the invention to a particular technological environment, e.g. generic computer hardware, “do[es] not render an otherwise abstract concept any less abstract.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed Cir. 2017). Furthermore, because the patent relates to accelerometers to monitor the athletic performance, it is likewise abstract, as “information is . . . an intangible.” *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 6290, 6293 (Fed. Cir. 2016).

Moreover, under Alice Step 2, the ’457 Patent does not contain any inventive concept. The ’457 Patent’s asserted claims employ well-known components (e.g., a system with an accelerometer, a chronograph, a display, a belt, a digital processor, etc.) or functionality (e.g., measuring and/or calculating biomechanical parameters of a stride in running), as reflected in Defendant’s invalidity contentions under 35 U.S.C. §§ 102-103, which is not enough to impart patent-eligibility to an abstract idea. *See, e.g., Alice*, 573 U.S. at 225 (holding that limitations describing “‘well-understood, routine, conventional activit[ies]’ previously known to the industry” were insufficient to supply an inventive concept (quoting *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 73 (2012))).

## E. '134 Patent

In addition to the preceding invalidity contentions, Defendant further contends that each of the asserted claims of the '134 Patent is drawn to subject matter that is not patentable under 35 U.S.C. § 101. The '134 Patent's asserted claims are invalid under 35 U.S.C. § 101 for failure to recite patent-eligible subject matter. Specifically, all asserted claims of the '134 patent are fatally abstract under the U.S. Supreme Court's decision in *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014) and progeny. The abstract ideas presented in the claims are generally directed to the abstract concept of monitoring an athletic performance of a user using an accelerometer. Under Alice Step 1, those ideas are abstract, as they relate to accelerometers to monitor the athletic performance, such as the acceleration of the user. *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1314 (Fed. Cir. 2016); *Silver State Intellectual Techs. v. Facebook Inc.*, 2018 WL 1729444, at \*4-\*5 (N.D. Cal. 2018); *VeriPath, Inc. v. Didomi*, 2020 WL 1503687, at \*3-\*4 (S.D.N.Y. 2020); *Kaleasy Tech LLC v. Slack Techs., Inc.*, 2020 WL 4260605, at \*4-\*6 (D. Del. 2020); *Grecia v. Bank of New York Mellon Corp.*, 2020 WL 1979276, at \*4-\*9 (S.D.N.Y. 2020); *Tele-Publishing, Inc. v. Facebook, Inc.*, 2017 WL 1959218, at \*5-\*10 (D. Mass. 2017); *Atos, LLC v. Allstate Ins. Co.*, 2021 WL 6063963, at \*9-\*12 (N.D. Ill. 2021); *ChargePoint, Inc. v. SemaConnect, Inc.*, 2018 WL 1471685, at \*8-\*11 (D. Md. 2018), *aff'd*, 920 F.3d 759, 768-75 (Fed. Cir. 2019); *UbiComm, LLC v. Zappos IP, Inc.*, 2013 WL 6019203, at \*3-\*6 (D. Del. 2013); *Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd.*, 955 F.3d 1317, 1326-31 (Fed. Cir. 2020); *Broadcom Corp. v. Netflix Inc.*, 2022 WL 1105073, at \*4-\*6 (N.D. Cal. 2022); *CG Tech. Dev., LLC v. Fanduel, Inc.*, 2020 WL 1064863, at \*3-\*5 (D. Del. 2020); *CardioNet, LLC v. Scottcare Corp.*, 2019 WL 3072702, at \*7-\*10, \*19-\*21 (E.D. Pa. 2019); *RingCentral, Inc. v. Dialpad, Inc.*, 2019 WL 1102986, at \*3-\*6 (N.D. Cal. 2019); *Umbanet, Inc. v. Epsilon Data Mgmt., LLC*, 2017 WL 1398274, at \*4-\*5 (E.D. Tex. 2017); *Protegrity USA, Inc. v. Netskope, Inc.*, 2015 WL 6126599, at \*6-\*8 (N.D. Cal. 2015); *Mantissa Corp. v. Ondot Sys., Inc.*, 2017 WL 3437773, at

\*7-\*19 (S.D. Tex. 2017); *Beteiro, LLC v. BetMGM, LLC*, 2022 WL 4092946, at \*6-\*10 (D.N.J. 2022); *Mira Advanced Tech. Sys., Inc. v. Google LLC*, 2022 WL 3925235, at \*4-\*6 (S.D.N.Y. 2022); *Liquet Techs., Inc. v. Tile, Inc.*, 2021 WL 4198521, at \*4-\*7 (N.D. Cal. 2021); *RDPA, LLC v. Geopath, Inc.*, 2021 WL 2440700, at \*12-\*17 (S.D. N.Y. 2021); *B# on Demand LLC v. Spotify Tech. S.A.*, 2020 WL 5369185, at \*8-\*14 (D. Del. 2020); *ClearDoc, Inc. v. RiversideFM, Inc.*, 2022 WL 3355960, at \*3-\*5 (D. Del. 2022); *DigiMedia Tech, LLC v. ViacomCBS Inc.*, 2022 WL 836788 at \*5-\*8 (S.D.N.Y. 2022). A claim is drawn to an abstract idea when “humans have always performed [the claimed] functions.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, NA*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Limiting the invention to a particular technological environment, e.g. generic computer hardware, “do[es] not render an otherwise abstract concept any less abstract.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed Cir. 2017). Furthermore, because the patent relates to accelerometers to monitor the athletic performance, it is likewise abstract, as “information is . . . an intangible.” *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 6290, 6293 (Fed. Cir. 2016).

Moreover, under Alice Step 2, the ’134 Patent does not contain any inventive concept. The ’134 Patent’s asserted claims employ well-known components (e.g., a system with an accelerometer) or functionality (e.g., an accelerometer to monitor an athletic performance, such as the acceleration of a user), as reflected in Defendant’s invalidity contentions under 35 U.S.C. §§ 102-103, which is not enough to impart patent-eligibility to an abstract idea. *See, e.g., Alice*, 573 U.S. at 225 (holding that limitations describing “‘well-understood, routine, conventional activit[ies]’ previously known to the industry” were insufficient to supply an inventive concept (quoting *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 73 (2012))).

#### **F. ’678 Patent**

In addition to the preceding invalidity contentions, Defendant further contend that each

of the asserted claims of the '678 Patent is drawn to subject matter that is not patentable under 35 U.S.C. § 101. The '678 Patent's asserted claims are invalid under 35 U.S.C. § 101 for failure to recite patent-eligible subject matter. Specifically, all asserted claims of the '678 patent are fatally abstract under the U.S. Supreme Court's decision in *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014) and progeny. The abstract ideas presented in the claims are generally directed to the abstract concept of waking up a wristwatch from a sleep mode in successive stages. Under Alice Step 1, those ideas are abstract, as they relate to watches with an electronic display to display time. See *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1314 (Fed. Cir. 2016); *Silver State Intellectual Techs. v. Facebook Inc.*, 2018 WL 1729444, at \*4-\*5 (N.D. Cal. 2018); *VeriPath, Inc. v. Didomi*, 2020 WL 1503687, at \*3-\*4 (S.D.N.Y. 2020); *Kaleasy Tech LLC v. Slack Techs., Inc.*, 2020 WL 4260605, at \*4-\*6 (D. Del. 2020); *Grecia v. Bank of New York Mellon Corp.*, 2020 WL 1979276, at \*4-\*9 (S.D.N.Y. 2020); *Tele-Publishing, Inc. v. Facebook, Inc.*, 2017 WL 1959218, at \*5-\*10 (D. Mass. 2017); *Atos, LLC v. Allstate Ins. Co.*, 2021 WL 6063963, at \*9-\*12 (N.D. Ill. 2021); *ChargePoint, Inc. v. SemaConnect, Inc.*, 2018 WL 1471685, at \*8-\*11 (D. Md. 2018), *aff'd*, 920 F.3d 759, 768-75 (Fed. Cir. 2019); *UbiComm, LLC v. Zappos IP, Inc.*, 2013 WL 6019203, at \*3-\*6 (D. Del. 2013); *Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd.*, 955 F.3d 1317, 1326-31 (Fed. Cir. 2020); *Broadcom Corp. v. Netflix Inc.*, 2022 WL 1105073, at \*4-\*6 (N.D. Cal. 2022); *CG Tech. Dev., LLC v. Fanduel, Inc.*, 2020 WL 1064863, at \*3-\*5 (D. Del. 2020); *CardioNet, LLC v. Scottcare Corp.*, 2019 WL 3072702, at \*7-\*10, \*19-\*21 (E.D. Pa. 2019); *RingCentral, Inc. v. Dialpad, Inc.*, 2019 WL 1102986, at \*3-\*6 (N.D. Cal. 2019); *Umbanet, Inc. v. Epsilon Data Mgmt., LLC*, 2017 WL 1398274, at \*4-\*5 (E.D. Tex. 2017); *Protegrity USA, Inc. v. Netskope, Inc.*, 2015 WL 6126599, at \*6-\*8 (N.D. Cal. 2015); *Mantissa Corp. v. Ondot Sys., Inc.*, 2017 WL 3437773, at \*7-\*19 (S.D. Tex. 2017); *Beteiro, LLC v. BetMGM, LLC*, 2022 WL 4092946, at \*6-\*10 (D.N.J. 2022); *Mira Advanced Tech. Sys., Inc. v. Google LLC*, 2022 WL 3925235, at \*4-\*6 (S.D.N.Y. 2022); *Liquet Techs.,*

*Inc. v. Tile, Inc.*, 2021 WL 4198521, at \*4- \*7 (N.D. Cal. 2021); *RDPA, LLC v. Geopath, Inc.*, 2021 WL 2440700, at \*12-\*17 (S.D. N.Y. 2021); *B# on Demand LLC v. Spotify Tech. S.A.*, 2020 WL 5369185, at \*8-\*14 (D. Del. 2020); *ClearDoc, Inc. v. RiversideFM, Inc.*, 2022 WL 3355960, at \*3-\*5 (D. Del. 2022); *DigiMedia Tech, LLC v. ViacomCBS Inc.*, 2022 WL 836788 at \*5-\*8 (S.D.N.Y. 2022). A claim is drawn to an abstract idea when “humans have always performed [the claimed] functions.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, NA*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Limiting the invention to a particular technological environment, e.g. generic computer hardware, “do[es] not render an otherwise abstract concept any less abstract.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed Cir. 2017). Furthermore, because the patent relates to watches with an electronic display to display time, it is likewise abstract, as “information is . . . an intangible.” *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 6290, 6293 (Fed. Cir. 2016).

Moreover, under Alice Step 2, the '678 Patent does not contain any inventive concept. The '678 Patent's asserted claims employ well-known components (e.g., electronic watches with an accelerometer, processor, and microcontroller) or functionality (e.g., a watch able to display time when a user wishes to see the time), as reflected in Defendant's invalidity contentions under 35 U.S.C. §§ 102-103, which is not enough to impart patent- eligibility to an abstract idea. *See, e.g., Alice*, 573 U.S. at 225 (holding that limitations describing “‘well-understood, routine, conventional activit[ies]’ previously known to the industry” were insufficient to supply an inventive concept (quoting *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 73 (2012))).

#### **G. '085 Patent**

In addition to the preceding invalidity contentions, Defendant further contend that each of the asserted claims of the '085 Patent is drawn to subject matter that is not patentable under

35 U.S.C. § 101. The '085 Patent's asserted claims are invalid under 35 U.S.C. § 101 for failure to recite patent-eligible subject matter. Specifically, all asserted claims of the '085 patent are fatally abstract under the U.S. Supreme Court's decision in *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014) and progeny. The abstract ideas presented in the claims are generally directed to the abstract concept of waking up a wristwatch from a sleep mode. Under Alice Step 1, those ideas are abstract, as they relate to watches with an electronic display to display time. *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1314 (Fed. Cir. 2016); *Silver State Intellectual Techs. v. Facebook Inc.*, 2018 WL 1729444, at \*4-\*5 (N.D. Cal. 2018); *VeriPath, Inc. v. Didomi*, 2020 WL 1503687, at \*3-\*4 (S.D.N.Y. 2020); *Kaleasy Tech LLC v. Slack Techs., Inc.*, 2020 WL 4260605, at \*4-\*6 (D. Del. 2020); *Grecia v. Bank of New York Mellon Corp.*, 2020 WL 1979276, at \*4-\*9 (S.D.N.Y. 2020); *Tele-Publishing, Inc. v. Facebook, Inc.*, 2017 WL 1959218, at \*5-\*10 (D. Mass. 2017); *Atos, LLC v. Allstate Ins. Co.*, 2021 WL 6063963, at \*9-\*12 (N.D. Ill. 2021); *ChargePoint, Inc. v. SemaConnect, Inc.*, 2018 WL 1471685, at \*8-\*11 (D. Md. 2018), *aff'd*, 920 F.3d 759, 768-75 (Fed. Cir. 2019); *UbiComm, LLC v. Zappos IP, Inc.*, 2013 WL 6019203, at \*3-\*6 (D. Del. 2013); *Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd.*, 955 F.3d 1317, 1326-31 (Fed. Cir. 2020); *Broadcom Corp. v. Netflix Inc.*, 2022 WL 1105073, at \*4-\*6 (N.D. Cal. 2022); *CG Tech. Dev., LLC v. Fanduel, Inc.*, 2020 WL 1064863, at \*3-\*5 (D. Del. 2020); *CardioNet, LLC v. Scottcare Corp.*, 2019 WL 3072702, at \*7-\*10, \*19-\*21 (E.D. Pa. 2019); *RingCentral, Inc. v. Dialpad, Inc.*, 2019 WL 1102986, at \*3-\*6 (N.D. Cal. 2019); *Umbanet, Inc. v. Epsilon Data Mgmt., LLC*, 2017 WL 1398274, at \*4-\*5 (E.D. Tex. 2017); *Protegrity USA, Inc. v. Netskope, Inc.*, 2015 WL 6126599, at \*6-\*8 (N.D. Cal. 2015); *Mantissa Corp. v. Ondot Sys., Inc.*, 2017 WL 3437773, at \*7-\*19 (S.D. Tex. 2017); *Beteiro, LLC v. BetMGM, LLC*, 2022 WL 4092946, at \*6-\*10 (D.N.J. 2022); *Mira Advanced Tech. Sys., Inc. v. Google LLC*, 2022 WL 3925235, at \*4-\*6 (S.D.N.Y. 2022); *Liquet Techs., Inc. v. Tile, Inc.*, 2021 WL 4198521, at \*4-\*7 (N.D. Cal. 2021); *RDPA, LLC v. Geopath, Inc.*, 2021 WL 2440700,

at \*12-\*17 (S.D. N.Y. 2021); *B# on Demand LLC v. Spotify Tech. S.A.*, 2020 WL 5369185, at \*8-\*14 (D. Del. 2020); *ClearDoc, Inc. v. RiversideFM, Inc.*, 2022 WL 3355960, at \*3-\*5 (D. Del. 2022); *DigiMedia Tech, LLC v. ViacomCBS Inc.*, 2022 WL 836788 at \*5-\*8 (S.D.N.Y. 2022). A claim is drawn to an abstract idea when “humans have always performed [the claimed] functions.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, NA*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Limiting the invention to a particular technological environment, e.g. generic computer hardware, “do[es] not render an otherwise abstract concept any less abstract.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed Cir. 2017). Furthermore, because the patent relates to watches with an electronic display to display time, it is likewise abstract, as “information is . . . an intangible.” *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 6290, 6293 (Fed. Cir. 2016).

Moreover, under Alice Step 2, the '085 Patent does not contain any inventive concept. The '085 Patent's asserted claims employ well-known components (e.g., electronic watches with an accelerometer) or functionality (e.g., a watch able to display time when a user wishes to see the time), as reflected in Defendant's invalidity contentions under 35 U.S.C. §§ 102-103, which is not enough to impart patent- eligibility to an abstract idea. *See, e.g., Alice*, 573 U.S. at 225 (holding that limitations describing “‘well-understood, routine, conventional activit[ies]’ previously known to the industry” were insufficient to supply an inventive concept (quoting *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 73 (2012))).

## **VI. DOCUMENT PRODUCTION**

Pursuant to Patent Local Rule 3-4, Defendant is concurrently producing the prior art identified in these Invalidity Contentions, but Defendant is not required to produce the prior art in the file history of the Asserted Patents. In addition, based on its investigations to date, Defendant is concurrently producing source code, specifications, schematics, flow charts, artwork, formulas, or other documentation sufficient to show the operation of any aspects or

elements of the Accused Instrumentalities identified by Plaintiff in its P. R. 3-1(c) chart.

Defendant reserves the right to supplement these productions with additional documentation, in accordance with the Federal Rules of Civil Procedure, the Local Rules, the Court's orders and other applicable rules and statutes.

Dated: May 15, 2024

Respectfully submitted,

/s/ Donald R. McPhail

**CERTIFICATE OF SERVICE**

Pursuant to the Federal Rules of Civil Procedure, I hereby certify that, on May 15, 2024, all counsel of record who have appeared in this case are being served with a copy of the foregoing via the electronic mail.

/s/ Donald R. McPhail