






























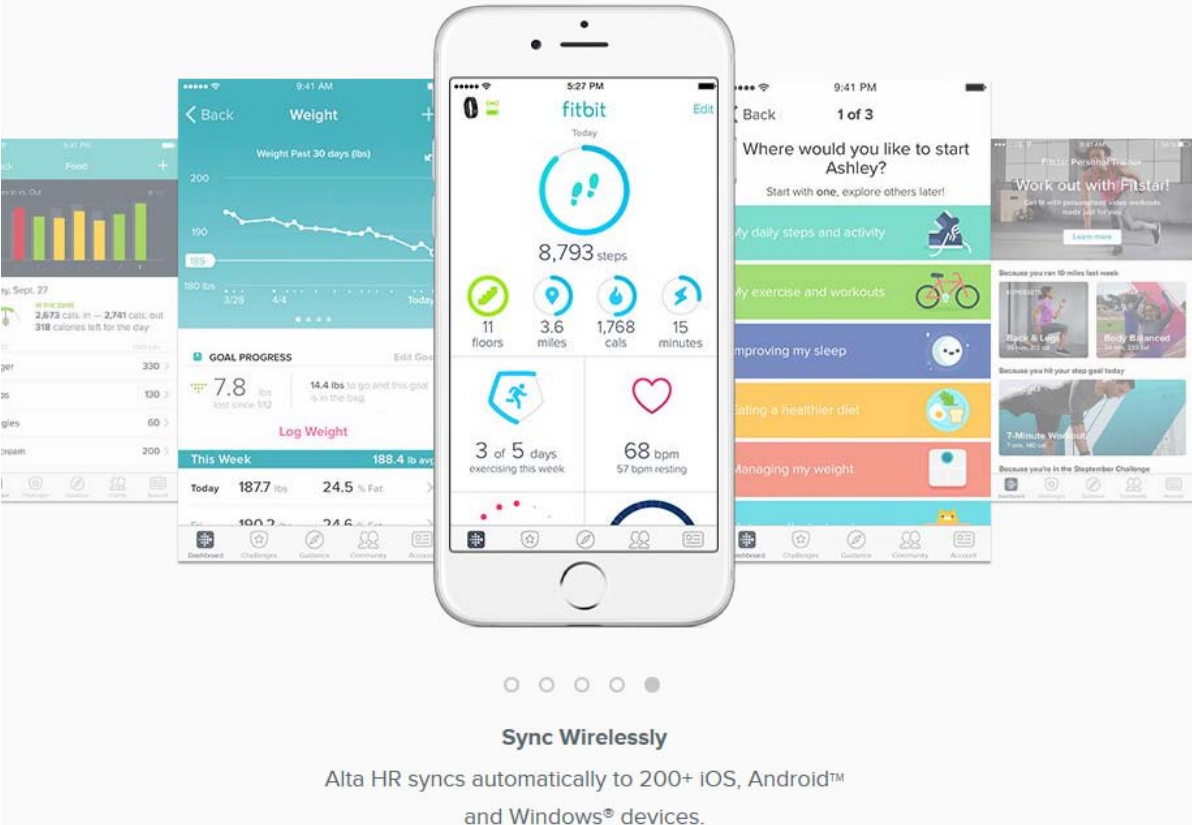


C-2

**Immersion Corporation**  
U.S. Patent No. 8,638,301  
**Infringement Contentions to Fitbit, Inc.**


U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products												
Claim 27. A system comprising :	<p>The Fitbit Accused Product, the Fitbit Alta HR (hereinafter “the Accused Product”) provides a system.</p> <p>The Fitbit Accused Product provides system of an interaction between a fitness tracker band and a smartphone. See <a href="https://www.theverge.com/2017/4/11/15257484/fitbit-alta-hr-review-fitness-tracker-band">https://www.theverge.com/2017/4/11/15257484/fitbit-alta-hr-review-fitness-tracker-band</a>; <a href="https://www.wired.com/2017/04/review-fitbit-alta-hr/">https://www.wired.com/2017/04/review-fitbit-alta-hr/</a>; <a href="http://www.pocket-lint.com/review/140455-fitbit-alta-hr-review-the-best-everyday-fitness-tracker">http://www.pocket-lint.com/review/140455-fitbit-alta-hr-review-the-best-everyday-fitness-tracker</a>.</p> <p>For example, the Accused Products practices a system as a fitness tracker band synchronizing with a smartphone.</p> <div><div></div><div><table><tr><th>Standout Features</th><th>Standout Features</th></tr><tr><td> PurePulse® Heart Rate</td><td> PurePulse® Heart Rate</td></tr><tr><td> Auto Sleep Tracking &amp; Sleep Stages¹</td><td> Auto Sleep Tracking &amp; Sleep Stages¹</td></tr><tr><td> Call, Text &amp; Calendar Alerts</td><td> Call, Text &amp; Calendar Alerts</td></tr><tr><td> Reminders to Move</td><td> Reminders to Move</td></tr><tr><td> Cardio Fitness Level</td><td> Cardio Fitness Level</td></tr></table></div></div> <p>Source: Fitbit, Inc., Alta HR, available at <a href="https://www.fitbit.com/altahr">https://www.fitbit.com/altahr</a>.</p> <p>In particular, the Accused Product is configured to pair or sync with a smartphone (e.g. iPhone or Android) as shown in the pictures above and below.</p>	Standout Features	Standout Features	 PurePulse® Heart Rate	 PurePulse® Heart Rate	 Auto Sleep Tracking & Sleep Stages¹	 Auto Sleep Tracking & Sleep Stages¹	 Call, Text & Calendar Alerts	 Call, Text & Calendar Alerts	 Reminders to Move	 Reminders to Move	 Cardio Fitness Level	 Cardio Fitness Level
Standout Features	Standout Features												
 PurePulse® Heart Rate	 PurePulse® Heart Rate												
 Auto Sleep Tracking & Sleep Stages¹	 Auto Sleep Tracking & Sleep Stages¹												
 Call, Text & Calendar Alerts	 Call, Text & Calendar Alerts												
 Reminders to Move	 Reminders to Move												
 Cardio Fitness Level	 Cardio Fitness Level												

U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<div>  <p>Source: Fitbit, Inc., <i>Alta HR</i>, available at <a href="https://www.fitbit.com/altahr">https://www.fitbit.com/altahr</a>.</p> <p><b><u>INDIRECT INFRINGEMENT</u></b></p> <p>Fitbit indirectly infringes the '301 patent, under 35 U.S.C. § 271(b), by inducing infringement by others, such as manufacturers, resellers, developers, and customers, and end-users, and/or providing the fitness watch and a smartphone as components for use in an system of an interaction between a fitness watch and a smartphone that practices the invention in accordance with the element-by-element mapping of features to claim elements set forth in this chart for this claim and its dependent claims.</p> <p>As the element-by-element mapping shows, Fitbit provides ample “help” documentations that instruct a user in how to use the system to perform each of the functions which are described. Further, Fitbit provides instructions on how a user can set up a device and install software such that the features are enabled.</p> <p>For example, Fitbit provides a setup website to help and support the user to “Get the Fitbit App to Set Up Your Device” at <a href="https://www.fitbit.com/setup">https://www.fitbit.com/setup</a>. At that site, Fitbit specifically instructs the user to download the Fitbit App from one of several websites (e.g., Google Play, Apple App Store, or Windows Store). Further, if the user does not have a mobile device, Fitbit instructs that the user can download an application for an Apple or Windows personal computer. Fitbit</p> </div>

U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<p>provides further instructions and help to set up a user's device, as well.</p> <div data-bbox="565 352 1235 1142">  </div> <p>Source: Fitbit, Inc., “Get the Fitbit App to Set Up Your Device” (2017), available at <a href="https://www.fitbit.com/setup">https://www.fitbit.com/setup</a>; see also <a href="https://www.fitbit.com/app">https://www.fitbit.com/app</a>.</p> <p>Fitbit also provides answers on its website to popular topics and questions that other users have had setting up their devices. Further, Fitbit provides a support community to educate users about certain features. (See Fitbit, Inc., “Get the skinny on your Fitbit device,” <a href="http://help.fitbit.com/">http://help.fitbit.com/</a>.) Fitbit provides web pages with answers to popular topics and questions that other users have had setting up their devices. Further, Fitbit provides a support community to educate users about certain features. In addition, users can request certain features or options to be implemented in the Fitbit’s software and/or API such as on Fitbit’s “Ideas Board” online forum, which Fitbit provides at <a href="https://community.fitbit.com/t5/Feature-Requests/idb-p/features">https://community.fitbit.com/t5/Feature-Requests/idb-p/features</a>. Fitbit also provides How-To Videos to help users, as illustrated in the screenshot shown below. (See, e.g., Fitbit Inc., “How-To Videos,” <a href="https://www.fitbit.com/how-to">https://www.fitbit.com/how-to</a> (“Get started with your Fitbit products and find out how to make the most of features like sleep tools, exercise modes and more, with these short and sweet how-to videos.”).)</p>





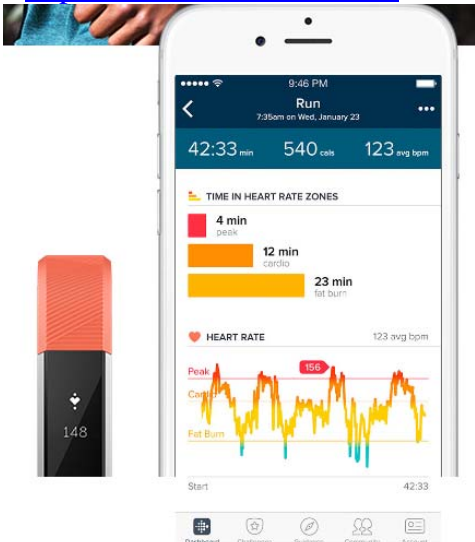
U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products																								
	<div data-bbox="440 285 1352 798"> </div> <p>Source: Fitbit Inc., “How-To Videos,” available at <a href="https://www.fitbit.com/how-to">https://www.fitbit.com/how-to</a>.</p>																								
a processor configured to:	<p>The Accused Product includes a processor.</p> <p>For example, the Accused Product ARM cortex M4 32-Bit MCU + FCU core Microcontroller. Further, the Microcontroller is configured to perform various instructions as listed below.</p> <p>The <i>Deep Dive Teardown of the Fitbit Alta FB4066TES – Bluetooth Activity Tracker</i> and Alta HR Specs pictures show the components of the Accused Product and identify a microcontroller (i.e. processor) and different types of sensors (e.g. accelerometer, altimeter). The microcontroller identified below (i.e. processor) is configured to perform various instructions.</p> <div data-bbox="284 1249 483 1864"> </div> <table border="1" data-bbox="906 1249 1409 1864"> <tbody> <tr><td>Product Type</td><td>Activity Tracker</td></tr> <tr><td>Brand</td><td>Fitbit Inc.</td></tr> <tr><td>Device Name</td><td>Alta</td></tr> <tr><td>Device Model #</td><td>FB406</td></tr> <tr><td>Official Release Date</td><td>3/9/2016</td></tr> <tr><td>Target Market</td><td>Worldwide</td></tr> <tr><td>Retail Price</td><td>\$129.00</td></tr> <tr><td>Weight (grams)</td><td>27.1 (Measured)</td></tr> <tr><td>Device Dimensions (mm)</td><td>40.81 x 15.56 x 12.36 (Measured at Longest/Widest/Thickest Points)</td></tr> <tr><td colspan="2">Product Features</td></tr> <tr><td>Operating System</td><td>Proprietary</td></tr> <tr><td>Processor Spec</td><td>ARM Cortex-M4 32-Bit MCU + FPU</td></tr> </tbody> </table> <p>Source: TechInsights Inc., <i>Deep Dive Teardown of the Fitbit Alta FB406TES - Bluetooth</i></p>	Product Type	Activity Tracker	Brand	Fitbit Inc.	Device Name	Alta	Device Model #	FB406	Official Release Date	3/9/2016	Target Market	Worldwide	Retail Price	\$129.00	Weight (grams)	27.1 (Measured)	Device Dimensions (mm)	40.81 x 15.56 x 12.36 (Measured at Longest/Widest/Thickest Points)	Product Features		Operating System	Proprietary	Processor Spec	ARM Cortex-M4 32-Bit MCU + FPU
Product Type	Activity Tracker																								
Brand	Fitbit Inc.																								
Device Name	Alta																								
Device Model #	FB406																								
Official Release Date	3/9/2016																								
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U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products															
	<p><i>Activity Tracker</i> (2017), available at <a href="http://techinsights.com/reports-and-subscriptions/open-market-reports/Report-Profile/?ReportKey=11255">http://techinsights.com/reports-and-subscriptions/open-market-reports/Report-Profile/?ReportKey=11255</a> (Since Alta HR is a similar component device to the Alta, the Alta specifications and components shall substitute for the Alta HR, with the difference being that the Alta HR includes a heart sensor and the Alta does not); <i>see, e.g.,</i> Pocket-lint Limited, <i>Fitbit Alta HR review: The best everyday fitness tracker?</i>, <a href="http://www.pocket-lint.com/review/140455-fitbit-alta-hr-review-the-best-everyday-fitness-tracker">http://www.pocket-lint.com/review/140455-fitbit-alta-hr-review-the-best-everyday-fitness-tracker</a>. <a href="https://www.dcrainmaker.com/2017/06/fitbit-alta-hr-in-depth-review.html">https://www.dcrainmaker.com/2017/06/fitbit-alta-hr-in-depth-review.html</a>; <a href="http://www.smartwatchspecifications.com/Device/fitbit-alta-hr/">http://www.smartwatchspecifications.com/Device/fitbit-alta-hr/</a>.</p> <div data-bbox="284 609 482 1220">  </div> <table data-bbox="902 609 1411 1092"> <tr> <td>Connectivity</td><td>Upgradable 2.4 GHz Bluetooth 4.0, Custom USB</td></tr> <tr> <td>User Interface</td><td>Tappable Display</td></tr> <tr> <td rowspan="2">Storage</td><td>Internal: 2 MB Serial NOR Flash</td></tr> <tr> <td>External: N/A</td></tr> <tr> <td>Sensors</td><td>3-Axis MEMS Accelerometer</td></tr> <tr> <td>Battery Type</td><td>3.8 V, 36 mAh, Li-Polymer</td></tr> <tr> <td>Battery Life (Hrs.)</td><td>Use Time: 120 (5 days); Standby Time: N/A</td></tr> <tr> <td>Display</td><td>0.7" OLED, 128 x 36 Pixels, Monochrome</td></tr> </table> <p><i>Source:</i> TechInsights Inc., <i>Deep Dive Teardown of the Fitbit Alta FB406TES - Bluetooth Activity Tracker</i> (2017), available at <a href="http://techinsights.com/reports-and-subscriptions/open-market-reports/Report-Profile/?ReportKey=11255">http://techinsights.com/reports-and-subscriptions/open-market-reports/Report-Profile/?ReportKey=11255</a> (Since Alta HR is a similar component device to the Alta, the Alta specifications and components shall substitute for the Alta HR, with the difference being that the Alta HR includes a heart sensor and the Alta does not); <i>see, e.g.,</i> Pocket-lint Limited, <i>Fitbit Alta HR review: The best everyday fitness tracker?</i>, <a href="http://www.pocket-lint.com/review/140455-fitbit-alta-hr-review-the-best-everyday-fitness-tracker">http://www.pocket-lint.com/review/140455-fitbit-alta-hr-review-the-best-everyday-fitness-tracker</a>. <a href="https://www.dcrainmaker.com/2017/06/fitbit-alta-hr-in-depth-review.html">https://www.dcrainmaker.com/2017/06/fitbit-alta-hr-in-depth-review.html</a>; <a href="http://www.smartwatchspecifications.com/Device/fitbit-alta-hr/">http://www.smartwatchspecifications.com/Device/fitbit-alta-hr/</a>.</p>	Connectivity	Upgradable 2.4 GHz Bluetooth 4.0, Custom USB	User Interface	Tappable Display	Storage	Internal: 2 MB Serial NOR Flash	External: N/A	Sensors	3-Axis MEMS Accelerometer	Battery Type	3.8 V, 36 mAh, Li-Polymer	Battery Life (Hrs.)	Use Time: 120 (5 days); Standby Time: N/A	Display	0.7" OLED, 128 x 36 Pixels, Monochrome
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U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<div data-bbox="284 285 483 892">  </div> <div data-bbox="938 285 1461 955"> <p><b>What's Included</b></p> <ul style="list-style-type: none"> <li>• Fitbit Alta HR tracker</li> <li>• Alta HR classic band</li> <li>• Charging cable</li> </ul> <p><b>Sensors &amp; Components</b></p> <ul style="list-style-type: none"> <li>• Optical Heart Rate Tracker</li> <li>• 3-axis accelerometer</li> <li>• Vibration motor</li> </ul> <p><b>Display</b></p> <ul style="list-style-type: none"> <li>• OLED tap display</li> </ul> <p><b>Battery and Power</b></p> <p>We recommend charging Alta HR every few days</p> <p>Battery life up to 7 days. Battery life and charge c:</p> <ul style="list-style-type: none"> <li>• Battery type: Lithium-polymer</li> <li>• Charge time: One to two hours</li> <li>• Radio transceiver: Bluetooth 4.0</li> </ul> </div> <p data-bbox="284 955 1096 1029"><i>Source: Fitbit, Inc., Alta HR Specs (2017), available at <a href="https://www.fitbit.com/shop/altahr?color=blue-gray&amp;band=tpu">https://www.fitbit.com/shop/altahr?color=blue-gray&amp;band=tpu</a>.</i></p>
<p>receive a first sensor signal from a first sensor, the first sensor configured to detect a movement of a first mobile device;</p>	<p>The Accused Product includes a processor configured to receive a first sensor signal from a first sensor, the first sensor configured to detect a movement of a first mobile device.</p> <p>For example, the Accused Product includes a processor configured to receive sensor signals from at least the 3-axis accelerometer sensor (i.e. first sensor). Further, this sensor is configured to detect and track a user's movement or a variety of statistics, including steps taken, on the Accused Product (i.e. first mobile device).</p> <p>The pictures from the <i>Alta HR Specs</i> and the Alta HR Product Manual below show the accelerometer sensor, which tracks a user motion patterns. The Alta HR Features picture further illustrates that the Accused Product may detect, e.g., by way of the 3-axis accelerometer, movement from a user and it tracks the user's stats.</p>


U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<div data-bbox="284 289 483 892">  </div> <div data-bbox="938 289 1461 945"> <p><b>What's Included</b></p> <ul style="list-style-type: none"> <li>• Fitbit Alta HR tracker</li> <li>• Alta HR classic band</li> <li>• Charging cable</li> </ul> <p><b>Sensors &amp; Components</b></p> <ul style="list-style-type: none"> <li>• Optical Heart Rate Tracker</li> <li>• 3-axis accelerometer</li> <li>• Vibration motor</li> </ul> <p><b>Display</b></p> <ul style="list-style-type: none"> <li>• OLED tap display</li> </ul> <p><b>Battery and Power</b></p> <p>We recommend charging Alta HR every few days</p> <p>Battery life up to 7 days. Battery life and charge c:</p> <ul style="list-style-type: none"> <li>• Battery type: Lithium-polymer</li> <li>• Charge time: One to two hours</li> <li>• Radio transceiver: Bluetooth 4.0</li> </ul> </div> <div data-bbox="284 955 1096 1024"> <p>Source: Fitbit, Inc., <i>Alta HR Specs</i> (2017), available at <a href="https://www.fitbit.com/shop/altahr?color=blue-gray&amp;band=tpu">https://www.fitbit.com/shop/altahr?color=blue-gray&amp;band=tpu</a>.</p> </div> <div data-bbox="295 1071 498 1119"> <h2>Sensors</h2> </div> <div data-bbox="295 1161 1287 1197"> <p>Your Fitbit Alta HR contains the following sensors and motors:</p> </div> <div data-bbox="347 1236 1437 1314"> <ul style="list-style-type: none"> <li>• A MEMS 3-axis accelerometer, which tracks your motion patterns</li> <li>• An optical heart rate tracker</li> </ul> </div> <div data-bbox="295 1360 688 1411"> <h2>Haptic feedback</h2> </div> <div data-bbox="295 1446 1489 1480"> <p>Alta HR contains a vibration motor for alarms, goals, notifications, and reminders.</p> </div> <div data-bbox="284 1520 1331 1591"> <p>Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p. 29, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p> </div>

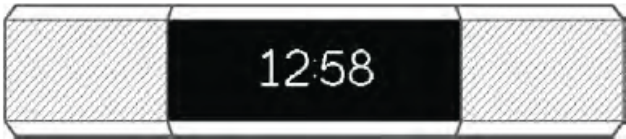



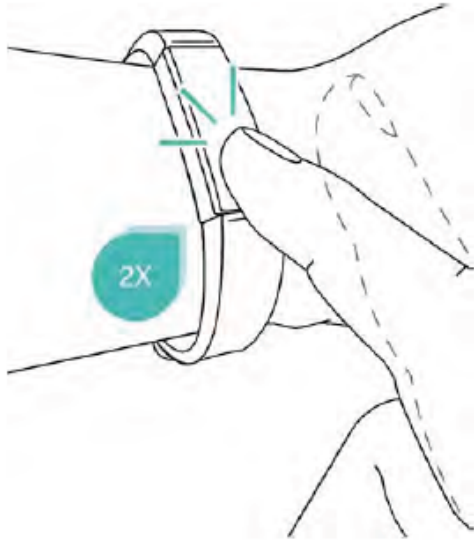
U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	 <p style="text-align: center;">Sync Wirelessly</p> <p style="text-align: center;">Alta HR syncs automatically to 200+ iOS, Android™ and Windows® devices.</p> <p><i>Source: Fitbit, Inc., Alta HR, available at <a href="https://www.fitbit.com/altahr">https://www.fitbit.com/altahr</a>.</i></p> <div style="display: flex; justify-content: space-between;"> <div data-bbox="282 1171 756 1680" style="width: 45%;"> <p> <b>Better calorie burn tracking</b></p> <p>By measuring your heart rate all day and during workouts, you get a more accurate measure of your calorie burn.</p> <p> <b>Make the most of each workout</b></p> <p>Use heart rate zones to see how hard you're working during exercise and dial your effort up or down.</p> <p> <b>Gain insight into your health</b></p> <p>See how working out more can impact your resting heart rate, a key indicator of cardiovascular health.</p> </div> <div data-bbox="794 1142 1265 1680" style="width: 50%;">  </div> </div>

U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<div data-bbox="289 300 703 333">  <b>Steps, Calories &amp; Distance</b> </div> <div data-bbox="349 352 781 449"> <p>Track your all-day activity, and tap the OLED display to see how close you are to your daily goal.</p> </div> <div data-bbox="289 499 509 533">  <b>SmartTrack</b> </div> <div data-bbox="349 541 631 567"> <p><b>Auto Exercise Recognition</b></p> </div> <div data-bbox="349 583 756 680"> <p>Alta HR auto-detects workouts like running, elliptical, biking and more, and logs them to your dashboard.</p> </div> <div data-bbox="284 695 1414 728"> <p>Source: Fitbit, Inc., <i>Alta HR Features</i> (2017), Available at <a href="https://www.fitbit.com/altahr">https://www.fitbit.com/altahr</a>.</p> </div> <div data-bbox="284 764 1357 823"> <h2>Automatic Tracking with Fitbit Alta HR</h2> </div> <div data-bbox="284 854 1401 917"> <p>Your Alta HR continuously tracks a variety of stats whenever you have it on. The information is transferred to your dashboard every time you sync your tracker.</p> </div> <div data-bbox="284 976 753 1024"> <h3>Viewing all-day stats</h3> </div> <div data-bbox="284 1058 888 1089"> <p>Tap your Alta HR to see these all-day stats:</p> </div> <div data-bbox="332 1125 774 1335"> <ul style="list-style-type: none"> <li>• Steps taken</li> <li>• Heart rate</li> <li>• Resting heart rate (optional)</li> <li>• Distance covered</li> <li>• Calories burned</li> <li>• Active minutes</li> </ul> </div> <div data-bbox="284 1367 1430 1430"> <p>On your Fitbit dashboard you can find other information captured by your tracker, such as:</p> </div> <div data-bbox="332 1465 1433 1667"> <ul style="list-style-type: none"> <li>• Your sleep history, including hours slept and sleep patterns</li> <li>• The hours of your day that you were stationary vs. active (walked at least 25 steps)</li> <li>• Your exercise history and progress towards a weekly exercise goal</li> <li>• Your beats per minute (BPM), average resting heart rate, and time spent in heart-rate zones</li> </ul> </div> <div data-bbox="284 1713 1081 1745"> <hr/> <p>Note: Alta HR stats reset at midnight to begin a new day.</p> <hr/> </div> <div data-bbox="284 1766 1331 1837"> <p>Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p.16, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p> </div>

U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<h2 data-bbox="313 291 1047 338">How does my tracker count steps?</h2> <hr data-bbox="313 378 1474 382"/> <p data-bbox="313 415 1455 636">Fitbit trackers use a 3-axis accelerometer to understand your motions. An accelerometer is a device that turns movement (acceleration) into digital measurements (data) when attached to the body. By analyzing acceleration data, our trackers provide detailed information about frequency, duration, intensity, and patterns of movement to determine your steps taken, distance traveled, calories burned, and sleep quality. The 3-axis implementation allows the accelerometer to measure your motion in any way that you move, making its activity measurements more precise than older, single-axis pedometers.</p> <p data-bbox="313 674 1471 968">Fitbit trackers have a finely tuned algorithm for step counting. The algorithm is designed to look for motion patterns that are most indicative of people walking. The algorithm determines whether a motion's size is large enough by setting a threshold. If the motion and its subsequent acceleration measurement meet the threshold, the motion will be counted as a step. If the threshold is not met, the motion won't be counted as a step. Other factors can create enough acceleration to meet our threshold and cause some over counting of steps, such as riding on a bumpy road. Equally, it's possible for the algorithm to undercount (not meet the required acceleration threshold). Examples here include walking on a very soft surface such as a plush carpet.</p> <p data-bbox="284 980 1474 1050"><i>Source:</i> Fitbit, Inc., <i>Fitbit Help - How does my tracker count steps?</i> (Last updated: March 14, 2017), available at <a href="https://help.fitbit.com/articles/en_US/Help_article/1143">https://help.fitbit.com/articles/en_US/Help_article/1143</a>.</p>
receive a second sensor signal from a second sensor, the second sensor configured to detect an interaction with the first mobile device;	<p data-bbox="269 1163 1495 1268">The Accused Products provide a processor that is configured to receive a second sensor signal from a second sensor, the second sensor configured to detect an interaction with the first mobile device.</p> <p data-bbox="269 1310 1490 1451">For example, the Accused Products provide a processor that is configured to receive another signal (i.e. second sensor signal) from the tap display (i.e. second sensor). Further, the Accused Product the tap display (i.e. second sensor) configured to detect an interaction with the Accused Product (i.e. first mobile device).</p> <p data-bbox="269 1493 1507 1633">As shown in the pictures below, the Accused Product provides a tap display, which is seen in the Alta Specs and the Alta Product Manual. In the following Alta Product Manual picture, the picture describes the tap display interaction with the Accused Product, which makes sure that the tracker can communicate with the user.</p>

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	<div data-bbox="293 296 662 793">  </div> <div data-bbox="938 289 1461 945"> <p><b>What's Included</b></p> <ul style="list-style-type: none"> <li>• Fitbit Alta HR tracker</li> <li>• Alta HR classic band</li> <li>• Charging cable</li> </ul> <p><b>Sensors &amp; Components</b></p> <ul style="list-style-type: none"> <li>• Optical Heart Rate Tracker</li> <li>• 3-axis accelerometer</li> <li>• Vibration motor</li> </ul> <p><b>Display</b></p> <ul style="list-style-type: none"> <li>• OLED tap display</li> </ul> <p><b>Battery and Power</b></p> <p>We recommend charging Alta HR every few days</p> <p>Battery life up to 7 days. Battery life and charge c</p> <ul style="list-style-type: none"> <li>• Battery type: Lithium-polymer</li> <li>• Charge time: One to two hours</li> <li>• Radio transceiver: Bluetooth 4.0</li> </ul> </div> <div data-bbox="282 953 1198 989"> <p>Source: Fitbit, Inc., <i>Alta HR</i>, available at <a href="https://www.fitbit.com/altahr">https://www.fitbit.com/altahr</a>.</p> </div> <div data-bbox="305 1087 506 1142"> <h2>Display</h2> </div> <div data-bbox="305 1184 862 1222"> <p>Alta HR has an OLED tap display.</p> </div> <div data-bbox="282 1249 1326 1320"> <p>Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p. 29, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a></p> </div>

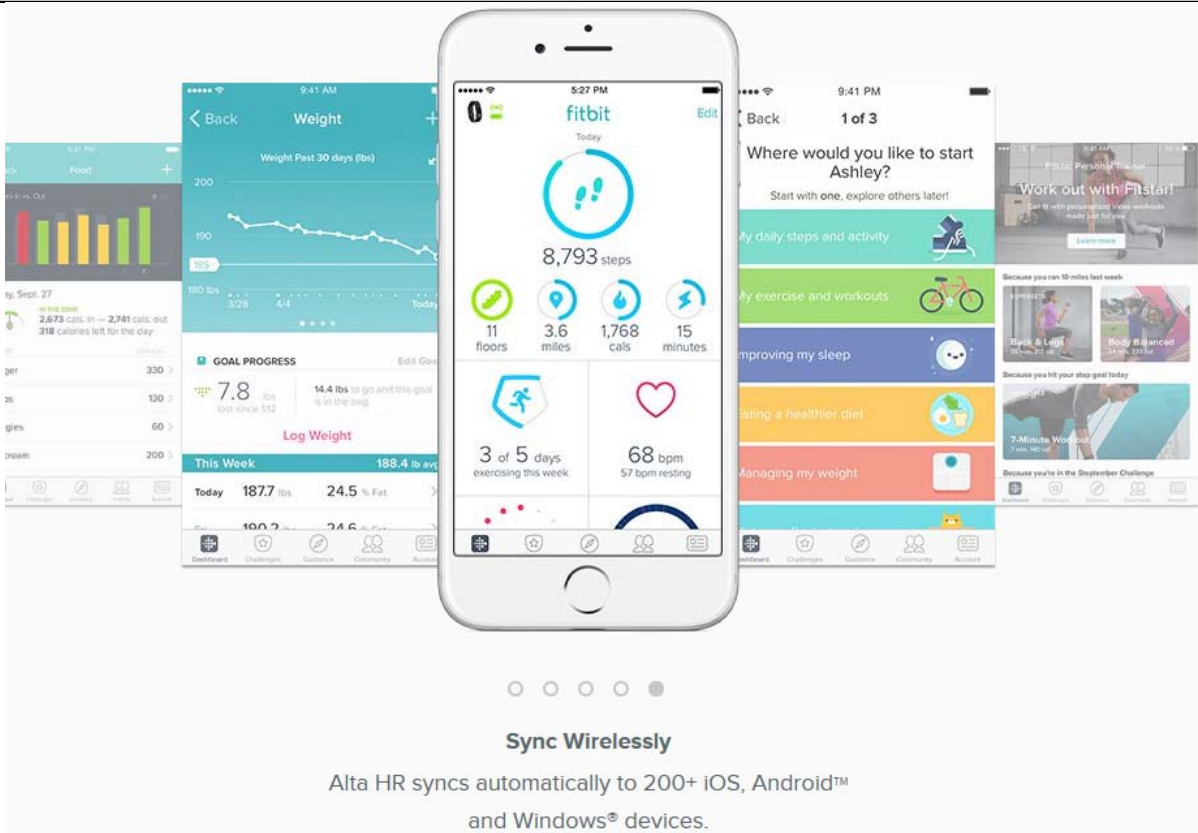
U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<p data-bbox="285 296 764 342">Using the Tap Display</p> <p data-bbox="285 373 1414 464">Alta HR has an OLED tap display that can be oriented horizontally or vertically. You can choose from several clock faces, each with a unique design. Single-tap the display to flip through your stats.</p> <div data-bbox="285 516 907 653">A horizontal rectangular OLED display with a black center section showing the time '12:58' in white. The left and right sections have a diagonal hatched pattern.</div> <div data-bbox="1110 516 1256 1184">A vertical rectangular OLED display with a black center section showing the time '02:58' in white. The top and bottom sections have a diagonal hatched pattern.</div>

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	<p>When you're not using Alta HR the screen is dimmed. To wake it up:</p> <ul style="list-style-type: none"> <li>• Double-tap your tracker.</li> <li>• Turn your wrist towards you. This behavior, known as Quick View, can be turned off in your tracker settings.</li> </ul> <p>For best results, tap your tracker where the screen meets the band as shown.</p>  <p><i>Source: Fitbit Inc., Alta HR Product Manual (2017), p. 29, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a></i></p>
<p>receive a first data signal from a network interface, the network interface configured to receive signals transmitted by a second mobile device;</p>	<p>The Accused Products provide a processor configured to receive a first data signal from a network interface, the network interface configured to receive signals transmitted by a second mobile device.</p> <p>For example, the Accused Products include a processor configured to receive data signals (i.e. data signal) via a Bluetooth transceiver (i.e. network interface). The Bluetooth transceiver is configured to receive signals transmitted by a smartphone (i.e. second mobile device), e.g., the Fitbit app is available for more than 200 mobile devices that support iOS, Android, and Windows 10 operating systems. Specifically, for example, the processor in the Accused Product receives data via the Bluetooth transceiver when the user of the Fitbit application changes the daily step count goal from 10,000 steps per day to 20,000 steps per day.</p> <p>Collectively, the pictures below show and illustrate that the Accused Product contains a processor configured to receive data signals via Bluetooth transceiver, and the transceiver is configured to receive signals transmitted (i.e. synchronized) by another mobile device, such as a smartphone, e.g., iPhone or Android phone.</p>



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Sync Wirelessly

Alta HR syncs automatically to 200+ iOS, Android™ and Windows® devices.

Source: Fitbit, Inc., *Alta HR*, available at <https://www.fitbit.com/altahr>.




Connectivity	Upgradable 2.4 GHz Bluetooth 4.0, Custom USB
User Interface	Tappable Display
Storage	Internal: 2 MB Serial NOR Flash
	External: N/A
Sensors	3-Axis MEMS Accelerometer
Battery Type	3.8 V, 36 mAh, Li-Polymer
Battery Life (Hrs.)	Use Time: 120 (5 days); Standby Time: N/A
Display	0.7" OLED, 128 x 36 Pixels, Monochrome

Source: TechInsights Inc., *Deep Dive Teardown of the Fitbit Alta FB406TES - Bluetooth Activity Tracker* (2017), available at <http://techinsights.com/reports-and-subscriptions/open-market-reports/Report-Profile/?ReportKey=11255> (Since Alta HR is a similar component device to the Alta, the Alta specifications and components shall substitute for the Alta HR, with the difference being that the Alta HR includes a heart sensor and the Alta does not); *see*,

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	<p>e.g., Pocket-lint Limited, <i>Fitbit Alta HR review: The best everyday fitness tracker?</i>, <a href="http://www.pocket-lint.com/review/140455-fitbit-alta-hr-review-the-best-everyday-fitness-tracker">http://www.pocket-lint.com/review/140455-fitbit-alta-hr-review-the-best-everyday-fitness-tracker</a>. <a href="https://www.dcrainmaker.com/2017/06/fitbit-alta-hr-in-depth-review.html">https://www.dcrainmaker.com/2017/06/fitbit-alta-hr-in-depth-review.html</a>; <a href="http://www.smartwatchspecifications.com/Device/fitbit-alta-hr/">http://www.smartwatchspecifications.com/Device/fitbit-alta-hr/</a>.</p> <h2>Wireless technology</h2> <p>Alta HR contains a Bluetooth 4.0 radio transceiver.</p> <p>Source: Fitbit, Inc., <i>Fitbit Alta HR Product Manual</i> (2017), p. 29, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p> <h2>Automatic Tracking with Fitbit Alta HR</h2> <p>Your Alta HR continuously tracks a variety of stats whenever you have it on. The information is transferred to your dashboard every time you sync your tracker.</p> <h3>Viewing all-day stats</h3> <p>Tap your Alta HR to see these all-day stats:</p> <ul style="list-style-type: none"> <li>• Steps taken</li> <li>• Heart rate</li> <li>• Resting heart rate (optional)</li> <li>• Distance covered</li> <li>• Calories burned</li> <li>• Active minutes</li> </ul> <p>On your Fitbit dashboard you can find other information captured by your tracker, such as:</p> <ul style="list-style-type: none"> <li>• Your sleep history, including hours slept and sleep patterns</li> <li>• The hours of your day that you were stationary vs. active (walked at least 250 steps)</li> <li>• Your exercise history and progress towards a weekly exercise goal</li> <li>• Your beats per minute (BPM), average resting heart rate, and time spent in heart-rate zones</li> </ul> <hr/> <p>Note: Alta HR stats reset at midnight to begin a new day.</p>



U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<p>Double-tap your Alta HR to wake it up. When you see the clock, tap to see each of your stats in turn. If you have an alarm set, you'll also see the next alarm time.</p> <div data-bbox="305 453 878 579"> </div> <div data-bbox="548 636 639 669">Steps</div> <div data-bbox="911 453 1484 579"> </div> <div data-bbox="1120 636 1274 669">Heart rate</div> <div data-bbox="305 728 878 854"> </div> <div data-bbox="331 913 855 947">Resting heart rate (optional screen)</div> <div data-bbox="911 728 1484 854"> </div> <div data-bbox="1130 913 1265 947">Distance</div> <div data-bbox="305 1005 855 1131"> </div> <div data-bbox="532 1215 657 1249">Calories</div> <div data-bbox="911 1005 1484 1131"> </div> <div data-bbox="1081 1215 1312 1249">Active minutes</div> <p>Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p.16, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p>

U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<p data-bbox="305 289 943 336">Tracking a daily activity goal</p> <p data-bbox="305 367 1474 428">Your Alta HR tracks your progress towards a daily activity goal of your choice. When you reach your goal, the tracker vibrates and shows a celebration.</p> <p data-bbox="305 489 584 527">Choosing a goal</p> <p data-bbox="305 556 1474 707">By default your goal is 10,000 steps per day, but you may have changed this goal when you set up your account. You can change the goal to distance traveled, calories burned, or active minutes and select the corresponding value you prefer. For example, you may want to keep steps as your goal but change the target from 10,000 to 20,000 steps.</p> <p data-bbox="305 768 672 806">Seeing goal progress</p> <p data-bbox="305 835 1466 896">A goal progress bar helps keep you motivated. The filled in portion of the bar shown below indicates that you're more than halfway to your goal.</p> <div data-bbox="618 926 1162 1041">  </div> <p data-bbox="282 1056 1331 1123"><i>Source:</i> Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p.16, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p> <p data-bbox="269 1165 1511 1417">As another example, the Accused Products include a processor configured to receive data signals via a Bluetooth transceiver, a network interface. The Bluetooth transceiver is configured to receive signals transmitted by a smartphone (i.e., The Fitbit app is available for more than 200 mobile devices that support iOS, Android, and Windows 10 operating systems.), a second mobile device. Specifically, the processor in the Accused Product is configured to receive data via the Bluetooth transceiver when the user of the Fitbit application (“app”) configures the Daily activity goal, which sets the daily goal based on Fitbit app settings.</p>

U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<p>Setting up your tracker on your mobile device</p> <p>The free Fitbit app is compatible with more than 200 mobile devices that support iOS, Android, and Windows 10 operating systems.</p> <p>To get started:</p> <ol style="list-style-type: none"> <li>1. Make sure the Fitbit app is compatible with your mobile device by checking <a href="http://www.fitbit.com/devices">http://www.fitbit.com/devices</a>.</li> <li>2. Find the Fitbit app in one of these locations, depending on your device: <ul style="list-style-type: none"> <li>• The Apple® App Store® for iOS devices such as an iPhone® or iPad®.</li> <li>• The Google Play™ Store for Android devices such as the Samsung® Galaxy® S6 and Motorola Droid Turbo 2.</li> <li>• The Microsoft® Windows Store for Windows 10 mobile devices such as the Lumia™ phone or Surface™ tablet.</li> </ul> </li> <li>3. Install the app. Note that if you don't have an account with the store you'll be required to create one before you can download the app.</li> <li>4. When the app is installed, open it and tap <b>Join Fitbit</b> to be guided through a series of questions that help you create your Fitbit account, or login to your existing account.</li> <li>5. Continue following the onscreen instructions to connect, or <i>pair</i>, your Alta HR to your mobile device. Pairing makes sure the tracker and mobile device can communicate with one another (sync data back and forth).</li> </ol> <p>When you're done pairing, read through the guide about your new tracker and then explore the Fitbit dashboard.</p> <p>Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p.2, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p>


U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<div data-bbox="313 279 1255 1182"> </div> <p data-bbox="282 1199 1195 1230"><i>Source:</i> Fitbit, Inc., <i>Alta HR</i>, available at <a href="https://www.fitbit.com/altahr">https://www.fitbit.com/altahr</a>.</p> <p data-bbox="269 1270 1510 1375">The Fitbit app on the mobile device (e.g. Android or Apple smartphone) connects to the Accused Product via Bluetooth. Next, the Fitbit app transmits the daily activity goal to the Accused Product for the user as shown below.</p>

U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<div data-bbox="310 285 402 310"><b>Memory</b></div> <div data-bbox="310 319 841 409"> <ul style="list-style-type: none"> <li>• Saves 7 days of detailed motion data – minute by minute.</li> <li>• Saves daily totals for past 30 days</li> </ul> </div> <div data-bbox="310 443 363 468"><b>Care</b></div> <div data-bbox="310 476 852 661"> <p>Alta HR is rain, sweat and splash proof, but not shower or swim proof. If your tracker gets wet or if you sweat in it, remove and completely dry the band before putting it back on. Give your wrist a rest by taking the band off every now and then, and regularly clean your band and wrist. <a href="#">Learn more.</a></p> </div> <div data-bbox="310 695 412 720"><b>Materials</b></div> <div data-bbox="310 728 849 947"> <p>The Fitbit Alta HR wristband is made of a flexible, durable elastomer material similar to that used in many sports watches. The tracker is made with surgical-grade stainless steel, and the buckle is made with aluminum. The Alta HR gunmetal tracker is made with premium PVD plating, and the rose gold tracker is plated with 22k rose gold.</p> </div> <div data-bbox="310 980 626 1005"><b>Environmental Requirements</b></div> <div data-bbox="310 1014 755 1075"> <ul style="list-style-type: none"> <li>• Operating temperature: 14° to 113° F</li> <li>• Maximum operating altitude: 30,000 feet</li> </ul> </div> <div data-bbox="935 285 1187 310"><b>Syncing &amp; Notifications</b></div> <div data-bbox="935 319 1461 504"> <p>Using Bluetooth LE wireless technology, Fitbit Alta HR sends smartphone notifications and syncs automatically to computers and 200+ mobile devices. Smartphone notifications may require Android 5.0+. <a href="#">Look up your device</a> to check compatibility.</p> </div> <div data-bbox="935 537 1461 789"> <ul style="list-style-type: none"> <li>• Syncing range: Up to 30 feet</li> <li>• Syncing requires Bluetooth LE and Internet connection. Windows 10 computers that do not have Bluetooth LE will need a <a href="#">wireless sync dongle</a> in order to sync.</li> <li>• Syncs with Mac OS X 10.6 and up, iPhone 4S and later, iPad 3 gen. and later, Android 4.4 and later, and Windows 10 devices.</li> </ul> </div> <div data-bbox="285 1108 1195 1142"> <p>Source: Fitbit, Inc., <i>Alta HR</i>, available at <a href="https://www.fitbit.com/altahr">https://www.fitbit.com/altahr</a>.</p> </div> <div data-bbox="285 1182 1503 1327"> <p>Further, the Fitbit App on the mobile device, for example, synchronizes (“syncs”) with the Accused Product. As shown below, the Fitbit App on the mobile device automatically transfers data to the Accused Product, such as settings or configurations, via Bluetooth Low Energy (BLE) technology.</p> </div> <div data-bbox="310 1381 1336 1428"> <h2>Syncing your tracker data to your Fitbit account</h2> </div> <div data-bbox="310 1459 1414 1570"> <p>When you start using your Alta HR you'll need to regularly sync it with your Fitbit dashboard. The dashboard is where you'll track progress, see your exercise history, track your sleep patterns, participate in challenges, and much more. We recommend syncing at least once a day.</p> </div> <div data-bbox="310 1596 1390 1652"> <p>The Fitbit apps and Fitbit Connect use Bluetooth Low Energy (BLE) technology to sync with your Fitbit tracker.</p> </div> <div data-bbox="310 1680 1343 1736"> <p>Each time you open the Fitbit app it syncs automatically if the paired tracker is nearby. You can also use the Sync Now option in the app at any time.</p> </div> <div data-bbox="310 1761 1401 1843"> <p>Fitbit Connect on your Mac syncs every 15 minutes if the tracker is within 30 feet of the computer. To force a sync, click the Fitbit Connect icon located near the date and time on your computer and choose Sync Now.</p> </div> <div data-bbox="298 1856 1346 1925"> <p>Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p. 4, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p> </div>



U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
<p>determine a change in a display signal based at least in part on the first data signal and the second sensor signal;</p>	<p>The Accused Product includes a processor configured to determine a change in a display signal based at least in part on the first data signal and the second sensor signal.</p> <p>For example, the Accused Product tracks the progress towards a daily goal as the data. In particular, the Accused Product uses its processor that is configured to determine the changes in the screens (i.e. display signal) based the user's steps and statistics on the steps taken (i.e. first data signal) and the user's interaction or navigation with the tap display input device (i.e. second sensor signal) that sets up the a tracking exercise.</p> <p>The pictures below show that the Accused Product allows for the user to interact with the touchscreen and tracks a variety of user's stats. Further, the pictures provide how the user can navigate the exercise menu on the Accused Product, and as an example, the Accused Product may determine a change in the display screen based on the user's daily activity goal.</p> <div data-bbox="315 892 1351 947" data-label="Section-Header"> <h2>Automatic Tracking with Fitbit Alta HR</h2> </div> <div data-bbox="310 978 1396 1039" data-label="Text"> <p>Your Alta HR continuously tracks a variety of stats whenever you have it on. The information is transferred to your dashboard every time you sync your tracker.</p> </div> <div data-bbox="310 1094 769 1142" data-label="Section-Header"> <h3>Viewing all-day stats</h3> </div> <div data-bbox="310 1171 898 1205" data-label="Text"> <p>Tap your Alta HR to see these all-day stats:</p> </div> <div data-bbox="354 1234 789 1440" data-label="List-Group"> <ul style="list-style-type: none"> <li>• Steps taken</li> <li>• Heart rate</li> <li>• Resting heart rate (optional)</li> <li>• Distance covered</li> <li>• Calories burned</li> <li>• Active minutes</li> </ul> </div> <div data-bbox="310 1467 1427 1528" data-label="Text"> <p>On your Fitbit dashboard you can find other information captured by your tracker, such as:</p> </div> <div data-bbox="354 1562 1455 1757" data-label="List-Group"> <ul style="list-style-type: none"> <li>• Your sleep history, including hours slept and sleep patterns</li> <li>• The hours of your day that you were stationary vs. active (walked at least 250 steps)</li> <li>• Your exercise history and progress towards a weekly exercise goal</li> <li>• Your beats per minute (BPM), average resting heart rate, and time spent in heart-rate zones</li> </ul> </div> <div data-bbox="310 1799 1083 1835" data-label="Text"> <p>Note: Alta HR stats reset at midnight to begin a new day.</p> </div>





U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<p>Double-tap your Alta HR to wake it up. When you see the clock, tap to see each of your stats in turn. If you have an alarm set, you'll also see the next alarm time.</p> <div data-bbox="305 453 878 579"> </div> <div data-bbox="548 636 639 669">Steps</div> <div data-bbox="911 453 1484 579"> </div> <div data-bbox="1120 636 1276 669">Heart rate</div> <div data-bbox="305 730 878 856"> </div> <div data-bbox="331 913 855 947">Resting heart rate (optional screen)</div> <div data-bbox="911 730 1484 856"> </div> <div data-bbox="1130 913 1265 947">Distance</div> <div data-bbox="305 1008 855 1134"> </div> <div data-bbox="532 1215 657 1249">Calories</div> <div data-bbox="911 1008 1484 1134"> </div> <div data-bbox="1081 1215 1312 1249">Active minutes</div> <p>Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p.16, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p>
































U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<p data-bbox="305 289 943 338">Tracking a daily activity goal</p> <p data-bbox="305 369 1474 432">Your Alta HR tracks your progress towards a daily activity goal of your choice. When you reach your goal, the tracker vibrates and shows a celebration.</p> <p data-bbox="305 489 586 531">Choosing a goal</p> <p data-bbox="305 558 1474 709">By default your goal is 10,000 steps per day, but you may have changed this goal when you set up your account. You can change the goal to distance traveled, calories burned, or active minutes and select the corresponding value you prefer. For example, you may want to keep steps as your goal but change the target from 10,000 to 20,000 steps.</p> <p data-bbox="305 768 672 810">Seeing goal progress</p> <p data-bbox="305 835 1466 898">A goal progress bar helps keep you motivated. The filled in portion of the bar shown below indicates that you're more than halfway to your goal.</p> <div data-bbox="618 926 1166 1045">  </div> <p data-bbox="282 1056 1331 1125"><i>Source:</i> Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p.16, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p> <p data-bbox="282 1167 1503 1308">In another example, the Accused Product displays and tracks the user's heart rate, steps, distance, calories burned, stairs climbed and active minutes. When the user uses Exercise Mode by using feature SmartTrack, the display changes and gives the user real-time states on your wrist, as illustrated below.</p> <p data-bbox="337 1339 721 1388">Tracking exercise</p> <p data-bbox="337 1419 1484 1535">SmartTrack ensures you get credit for your most active moments of the day. When you sync your tracker after a SmartTrack-detected exercise, you can find several stats in your exercise history including duration, calories burned, impact on your day, and more.</p> <p data-bbox="337 1566 1484 1686">By default, SmartTrack detects continuous movement at least 15 minutes in length. You can increase or decrease the minimum duration or disable SmartTrack for one or more exercise types. For more information about customizing and using SmartTrack, see <a href="https://help.fitbit.com">help.fitbit.com</a>.</p>



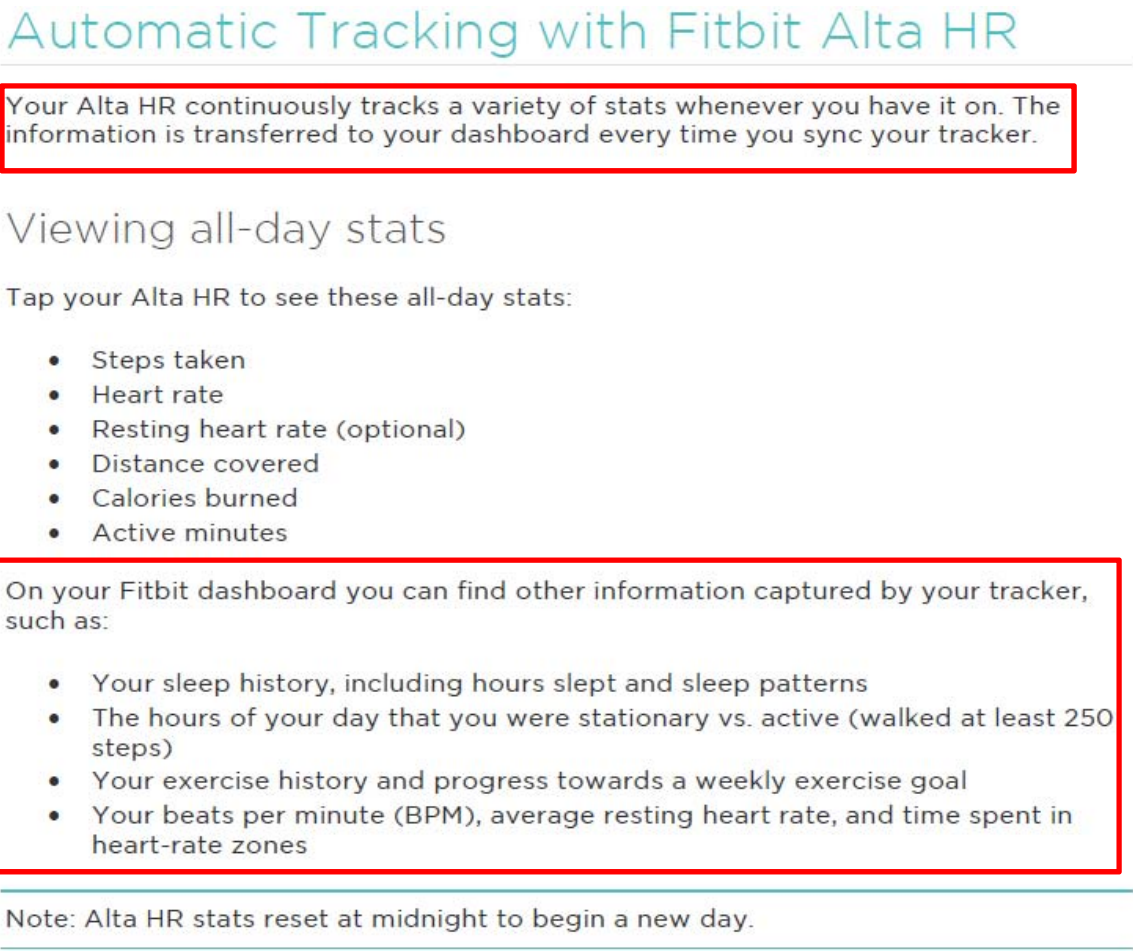
U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<p>Tracking hourly activity</p> <p>Alta HR helps keep you active throughout the day by keeping track of when you're stationary and reminding you to move.</p> <p>If you haven't walked at least 250 steps in a given hour, at ten minutes before the hour you'll feel a vibration reminding you to walk. When you meet the 250-step goal after receiving a reminder, you'll feel a second vibration and see a congratulatory message. For more information, including how to customize the hours you receive reminders, see <a href="http://help.fitbit.com">help.fitbit.com</a>.</p>  <p><i>Source: Fitbit Inc., Alta HR Product Manual (2017), p.16, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</i></p>  <p><i>Source: Fitbit Inc., Alta HR Product Manual (2017), p.16, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</i></p>
<p>determine a haptic effect based at least in part on the first data signal; and</p>	<p>The Accused Products include a processor configured to determine a haptic effect based at least in part on the first data signal.</p> <p>For example, the Accused Products provide a processor configured to determine a particular vibration or tactile pulse (i.e. haptic effect) based at least in part on the user's stats and steps taken (i.e. first data signal).</p> <p>The following pictures below show that the Accused Product contains haptic feedback, via a vibration motor. As an example, the pictures below show that the Accused Product may determine a haptic feedback based on the user's stat, such as the user meeting the 10,000 steps goal.</p> <p>Haptic feedback</p> <p>Alta HR contains a vibration motor for alarms, goals, notifications, and reminders.</p>

U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<p>Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p. 29, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p> <p>Tracking a daily activity goal</p> <p>Your Alta HR tracks your progress towards a daily activity goal of your choice. When you reach your goal, the tracker vibrates and shows a celebration.</p> <p>Choosing a goal</p> <p>By default your goal is 10,000 steps per day, but you may have changed this goal when you set up your account. You can change the goal to distance traveled, calories burned, or active minutes and select the corresponding value you prefer. For example, you may want to keep steps as your goal but change the target from 10,000 to 20,000 steps.</p> <p>Seeing goal progress</p> <p>A goal progress bar helps keep you motivated. The filled in portion of the bar shown below indicates that you're more than halfway to your goal.</p>  <p>Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p.16, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p>
outputting the haptic effect.	<p>The Accused Products include a processor configured to output the haptic effect.</p> <p>For example, the Accused Products include a processor configured to output a haptic feedback (i.e. haptic effect).</p> <p>The pictures below provide that the Accused Product is configured to output the particular haptic feedback, e.g., vibration or tactile pulse (i.e. haptic effect). As an example, the Accused Product vibrates with alarms, goals, and notifications, such as the user meeting the 10,000 steps goal.</p> <p>Haptic feedback</p> <p>Alta HR contains a vibration motor for alarms, goals, notifications, and reminders.</p> <p>Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p. 29, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p>

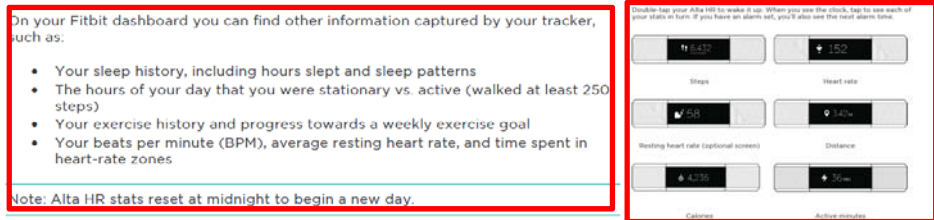
U.S. Patent No. 8,638,301	Fitbit, Inc. Accused Products
	<p data-bbox="321 289 959 338">Tracking a daily activity goal</p> <p data-bbox="321 369 1487 428">Your Alta HR tracks your progress towards a daily activity goal of your choice. When you reach your goal, the tracker vibrates and shows a celebration.</p> <p data-bbox="321 489 602 527">Choosing a goal</p> <p data-bbox="321 558 1487 709">By default your goal is 10,000 steps per day, but you may have changed this goal when you set up your account. You can change the goal to distance traveled, calories burned, or active minutes and select the corresponding value you prefer. For example, you may want to keep steps as your goal but change the target from 10,000 to 20,000 steps.</p> <p data-bbox="321 770 686 808">Seeing goal progress</p> <p data-bbox="321 835 1487 894">A goal progress bar helps keep you motivated. The filled in portion of the bar shown below indicates that you're more than halfway to your goal.</p> <div data-bbox="634 926 1179 1041">  </div> <p data-bbox="298 1056 1344 1125"><i>Source: Fitbit Inc., Alta HR Product Manual (2017), p.16, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</i></p>

Claim 28	Fitbit, Inc. Accused Products												
<p>The system of claim 27, wherein the first sensor and the second sensor are each configured to detect one or more of: contact, pressure, acceleration, inclination, inertia, or location.</p>	<p>The Accused Products provide that the first sensor and the second sensor are each configured to detect one or more of: contact, pressure, acceleration, inclination, inertia, or location.</p> <p>For example, the Accused Products provide that the first sensor (i.e. 3-axis accelerometer) and the second sensor (i.e. tap display) are each configured to detect one or more of: contact, pressure, acceleration, inclination, inertia, or location.</p> <p>The pictures below show that the Accused Product contains a tap display (i.e. contact pressure), MEMS 3-axis accelerometer (i.e. acceleration), and an altimeter (i.e. inclination and inertia).</p> <div data-bbox="308 567 682 1081">  </div> <div data-bbox="909 556 1485 882"> <table border="1"> <thead> <tr> <th data-bbox="917 567 1185 598">Standout Features</th><th data-bbox="1193 567 1477 598">Standout Features</th></tr> </thead> <tbody> <tr> <td data-bbox="917 630 1185 661"> PurePulse® Heart Rate</td><td data-bbox="1193 630 1477 661"> PurePulse® Heart Rate</td></tr> <tr> <td data-bbox="917 682 1185 724"> Auto Sleep Tracking &amp; Sleep Stages¹</td><td data-bbox="1193 682 1477 724"> Auto Sleep Tracking &amp; Sleep Stages¹</td></tr> <tr> <td data-bbox="917 745 1185 777"> Call, Text &amp; Calendar Alerts</td><td data-bbox="1193 745 1477 777"> Call, Text &amp; Calendar Alerts</td></tr> <tr> <td data-bbox="917 798 1185 829"> Reminders to Move</td><td data-bbox="1193 798 1477 829"> Reminders to Move</td></tr> <tr> <td data-bbox="917 850 1185 882"> Cardio Fitness Level</td><td data-bbox="1193 850 1477 882"> Cardio Fitness Level</td></tr> </tbody> </table> </div> <p>Source: Fitbit, Inc., <i>Alta HR</i>, available at <a href="https://www.fitbit.com/altahr">https://www.fitbit.com/altahr</a>.</p> <h2 data-bbox="308 1165 519 1228">Sensors</h2> <p data-bbox="308 1260 1307 1302">Your Fitbit Alta HR contains the following sensors and motors:</p> <ul data-bbox="357 1333 1461 1428" style="list-style-type: none"> <li>• A MEMS 3-axis accelerometer, which tracks your motion patterns</li> <li>• An optical heart rate tracker</li> </ul> <h2 data-bbox="308 1512 527 1585">Display</h2> <p data-bbox="308 1617 885 1669">Alta HR has an OLED tap display.</p> <p data-bbox="292 1680 1356 1764">Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p. 29, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p>	Standout Features	Standout Features	 PurePulse® Heart Rate	 PurePulse® Heart Rate	 Auto Sleep Tracking & Sleep Stages¹	 Auto Sleep Tracking & Sleep Stages¹	 Call, Text & Calendar Alerts	 Call, Text & Calendar Alerts	 Reminders to Move	 Reminders to Move	 Cardio Fitness Level	 Cardio Fitness Level
Standout Features	Standout Features												
 PurePulse® Heart Rate	 PurePulse® Heart Rate												
 Auto Sleep Tracking & Sleep Stages¹	 Auto Sleep Tracking & Sleep Stages¹												
 Call, Text & Calendar Alerts	 Call, Text & Calendar Alerts												
 Reminders to Move	 Reminders to Move												
 Cardio Fitness Level	 Cardio Fitness Level												

Claim 29	Fitbit, Inc. Accused Products
<p>The system of claim 27, wherein the second sensor comprises a touch-screen.</p>	<p>The Accused Products provide the second sensor comprises a touch-screen.</p> <p>For example, the Accused Products provide the second sensor comprises a tap display (i.e. touchscreen).</p> <p>As shown below, the Accused Product contains a tap display (i.e. second sensor).</p> <p>Display</p> <p>Alta HR has an OLED tap display.</p> <p>Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p. 29, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p>

Claim 31	Fitbit, Inc. Accused Products
<p>The system of claim 27, wherein the processor is further configured to transmit a second data signal to the network interface, and the network interface is further configured to transmit the second data signal to the second mobile device.</p>	<p>The Accused Products provide the processor is further configured to transmit a second data signal to the network interface, and the network interface is further configured to transmit the second data signal to the second mobile device.</p> <p>For example, as the picture below shows in the red boxes, the Accused Product provides that the processor is further configured to transmit information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results (i.e. second data signal) to the Bluetooth transceiver (i.e. network interface), and the Bluetooth transceiver (i.e. network interface) is further configured to transmit the information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results to smartphone, such as an iPhone or Android smartphone (i.e. second mobile device). By way of example, as shown in the red boxes in the picture below, the Accused Product provides that the processor is further configured to transmit or sync the information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results to the Bluetooth transceiver, and the Bluetooth transceiver is further configured to transmit the information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results to the Fitbit dashboard on a user's smartphone, such as an iPhone or Android smartphone.</p>  <p>The screenshot shows the 'Automatic Tracking with Fitbit Alta HR' section. It includes a red box highlighting the text: 'Your Alta HR continuously tracks a variety of stats whenever you have it on. The information is transferred to your dashboard every time you sync your tracker.' Below this is the 'Viewing all-day stats' section, which lists stats like Steps taken, Heart rate, Resting heart rate (optional), Distance covered, Calories burned, and Active minutes. Another red box highlights a list of additional information on the Fitbit dashboard: 'Your sleep history, including hours slept and sleep patterns', 'The hours of your day that you were stationary vs. active (walked at least 250 steps)', 'Your exercise history and progress towards a weekly exercise goal', and 'Your beats per minute (BPM), average resting heart rate, and time spent in heart-rate zones'. A note at the bottom states: 'Note: Alta HR stats reset at midnight to begin a new day.'</p> <p><i>Source: Fitbit Inc., Alta HR Product Manual (2017), p. 29, available at</i></p>



Claim 31	Fitbit, Inc. Accused Products
	<p data-bbox="300 214 1349 245"><a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p> <p data-bbox="287 285 1529 793">By way of another example, as the picture below shows in the red boxes, the Accused Product provides that the processor is further configured to transmit information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results (i.e. second data signal) to the Bluetooth transceiver (i.e. network interface), and the Bluetooth transceiver (i.e. network interface) is further configured to transmit the information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results to smartphone, such as an iPhone or Android smartphone (i.e. second mobile device). For instance, as shown in the red boxes in the picture below, the Accused Product provides that the processor is further configured to transmit or sync information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results to the Bluetooth transceiver, and the Bluetooth transceiver is further configured to transmit the information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results to the Fitbit dashboard on a user's smartphone, such as an iPhone or Android smartphone.</p> <div data-bbox="306 827 1235 1045">  <p data-bbox="315 835 899 871">On your Fitbit dashboard you can find other information captured by your tracker, such as:</p> <ul data-bbox="334 888 911 993" style="list-style-type: none"> <li>• Your sleep history, including hours slept and sleep patterns</li> <li>• The hours of your day that you were stationary vs. active (walked at least 250 steps)</li> <li>• Your exercise history and progress towards a weekly exercise goal</li> <li>• Your beats per minute (BPM), average resting heart rate, and time spent in heart-rate zones</li> </ul> <p data-bbox="315 1014 716 1031">Note: Alta HR stats reset at midnight to begin a new day.</p> <p data-bbox="932 827 1227 846">Consider how your Alta HR to make it easy. When you see the clock, tap to see each of your stats in turn. If you have an alarm set, you'll also see the next alarm time.</p> <p data-bbox="932 856 1227 1045">Steps: 1,527   Heart rate: 152 bpm  Resting heart rate (optional screen): 47 bpm   Distance: 0.6 mi  Calories: 420   Active minutes: 25 min</p> </div> <p data-bbox="300 1052 1349 1121">Source: Fitbit Inc., <i>Alta HR Product Manual</i> (2017), p. 29-30, available at <a href="https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf">https://staticcs.fitbit.com/content/assets/help/manuals/manual_alta_hr_en_US.pdf</a>.</p> <p data-bbox="287 1161 1529 1743">By way of another example, as the picture below shows in the red boxes, the Accused Product provides that the processor is further configured to transmit information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results (i.e. second data signal) to the Bluetooth transceiver (i.e. network interface), and the Bluetooth transceiver (i.e. network interface) is further configured to transmit the information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results to smartphone, such as an iPhone or Android smartphone (i.e. second mobile device). Accordingly, the Accused Product provides that the processor is further configured to transmit information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results (i.e. second data signal) to the Bluetooth transceiver (i.e. network interface), and the Bluetooth transceiver (i.e. network interface) is further configured to transmit the information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results data to smartphone, such as an iPhone or Android smartphone, by syncing or transferring the information corresponding to a summary of a user's tracked statistics and results, including daily activity goal results data collected from the tracker to the Fitbit dashboard.</p>

Claim 31	Fitbit, Inc. Accused Products
	<div data-bbox="435 216 1401 436"> <p><b>WHAT IS SYNCING?</b></p> <p><i>Syncing</i> is the process that transfers the data your tracker collects to your Fitbit dashboard. The dashboard is where you can track your progress, see how you slept, set goals, log food and water, challenge friends, and much more. Your tracker uses Bluetooth Low Energy (BLE) technology to sync with mobile devices and certain computers. The instructions in <a href="#">How do I set up my tracker?</a> explain how to make sure your Fitbit tracker can sync with the mobile device or computer you prefer.</p> </div> <div data-bbox="435 457 1380 766"> <p><b>WHEN DOES MY TRACKER SYNC?</b></p> <p>If your tracker is paired to the Fitbit app on a mobile device, it syncs every time you open the app. It can also sync periodically throughout the day if you have All-Day sync turned on. If you sync your tracker with a computer and Fitbit Connect, it syncs automatically every 15 to 30 minutes assuming the tracker and computer are in proximity, and the dongle is plugged in, if applicable.</p> <p>You can also initiate a sync whenever you like if your tracker is nearby. If you're using an iOS or Android mobile device, you can sync your tracker from the Fitbit app dashboard by touching your tracker image at the top of the screen and pulling down. Choose a section to see syncing instructions.</p> </div> <div data-bbox="443 787 1388 1060"> <ul style="list-style-type: none"> <li><a href="#">IOS DEVICES</a> ✓</li> <li><a href="#">ANDROID DEVICES</a> ✓</li> <li><a href="#">WINDOWS 10 MOBILE DEVICES AND COMPUTERS</a> ✓</li> <li><a href="#">MAC OR WINDOWS 8.1 COMPUTERS</a> ✓</li> </ul> </div> <p>Source: Fitbit, Inc., <i>How do Fitbit devices sync their data?</i> (2017), available at <a href="http://help.fitbit.com/articles/en_US/Help_article/1877?p=charge_2&amp;c=Topics%3AAndroid&amp;l=en_US&amp;fs=Search&amp;pn=1">http://help.fitbit.com/articles/en_US/Help_article/1877?p=charge_2&amp;c=Topics%3AAndroid&amp;l=en_US&amp;fs=Search&amp;pn=1</a>.</p>