

EXHIBIT A

Exhibit A
Infringement of U.S. Patent No. 10,032,227

JHT presently asserts the Accused Products infringe claims 1, 3, 5 6, 10, 11, 14, 16, 18, 19, and 20 of the '227 Patent directly and/or indirectly, either literally or under the doctrine of equivalents. JHT reserves the right to amend the following contentions as additional information becomes available.

'227 Patent	Peloton's Accused Products
1. An exercise apparatus comprising:	The Accused Products are exercise apparatuses.  https://www.onepeloton.com/tread/specs

'227 Patent	Peloton's Accused Products
a base;	The Accused Products include a base (identified by Peloton as a "platform").  https://www.onepeloton.com/tread/specs
an operating unit movable relative to the base;	The Accused Products include an operating unit (i.e. a belt) movable relative to the base. <i>See Peloton's Response to Request for Admission No. 1.</i>  https://www.onepeloton.com/tread/specs

'227 Patent	Peloton's Accused Products
a motor coupled to the operating unit;	The Accused Products utilize a "3 HP DC" motor that is coupled to the operating unit to simulate running speeds from "0 to 12.5 mph with 0.1 mph increments." PERFORMANCE Speed: 0 to 12.5 mph with 0.1 mph increments Incline: 0 to 12.5% grade with 0.5% increments Motor: 3 HP DC Screen adjustment: 0 - 50 deg vertical tilt, does not rotate horizontally Power rating: 120Vac, 60Hz, 12A https://www.onepeloton.com/tread/specs

a sensor operable to detect engagement of a user with the operating unit;

“The Accused Products utilize current sensors” to detect user engagement with the operating unit. *See Peloton’s Response to Interrogatory No. 10.*

Additionally, Peloton’s website states that “the belt on [the Accused Products] will come to a stop if it has been set to a speed above 0 mph and it does not detect a person running.”

Please note that even if you are in a class, the belt on your Peloton Tread or Peloton Tread+ will come to a stop if it has been set to a speed above 0 mph and it does not detect a person running.

<https://support.onepeloton.com/hc/en-us/articles/360060884531-Tread-Lock>

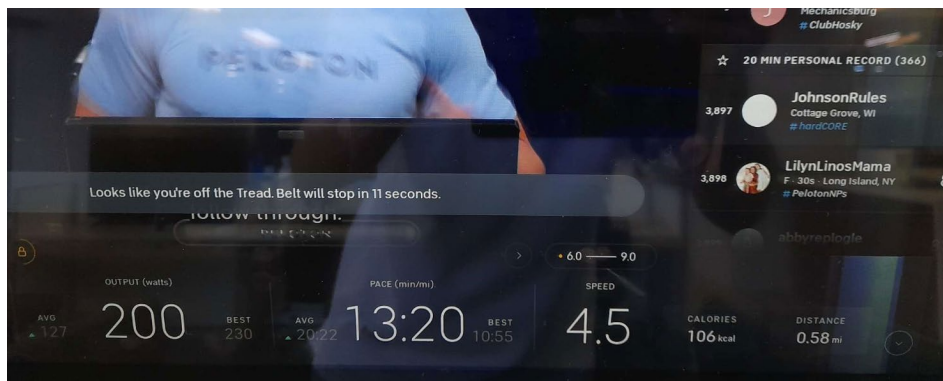
Based on testing, the Accused Products utilize software that (1) turns on a light around the stop button after a user has stepped off the operating unit (about 5 seconds after stepping off), and (2) displays a notification on the screen stating either: “Looks like you’re off the Tread. Belt will stop in 11 seconds” or “Your metrics are paused because you’re off the tread. Belt will stop in 10 seconds.”

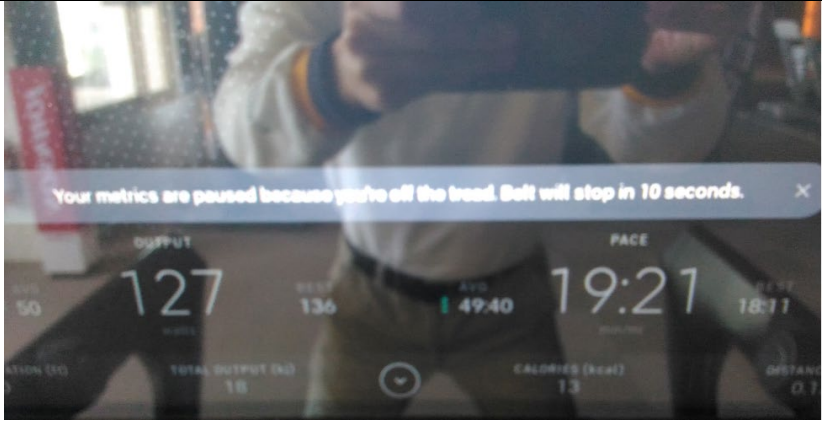


light before stepping off the Accused Products



light after stepping off the Accused Products



'227 Patent	Peloton's Accused Products
	 In order to detect a person running, the Accused Products must have a sensor that is operable to detect engagement of a user with the operating unit.
a controller in communication with the operating unit and the sensor; and	The Accused Products utilize a controller. <i>See Peloton's Response to Request for Admission No. 9.</i> The Accused Products' controller is capable of communicating with a current sensor and the operating unit. <i>See Peloton's Response to Request for Admission Nos. 11 and 13.</i>

a communication interface in communication with the controller,

The Accused Products have several communication interfaces, including a touchscreen. <https://www.onepeloton.com/tread/specs>



The Accused Products also utilize a communication interface in the form of internet connectivity options. Such options include “WiFi 802.11 a/b/g/n/ac – 2.4 GHz & 5GHz,” “ANT+ wireless,” and “100 Mbps (USB-C to Ethernet adapter only)” as shown in the image below.

CONNECTION

WiFi 802.11 a/b/g/n/ac - 2.4GHz & 5GHz

ANT+™ wireless

100 Mbps (USB-C to Ethernet adapter only, not included)

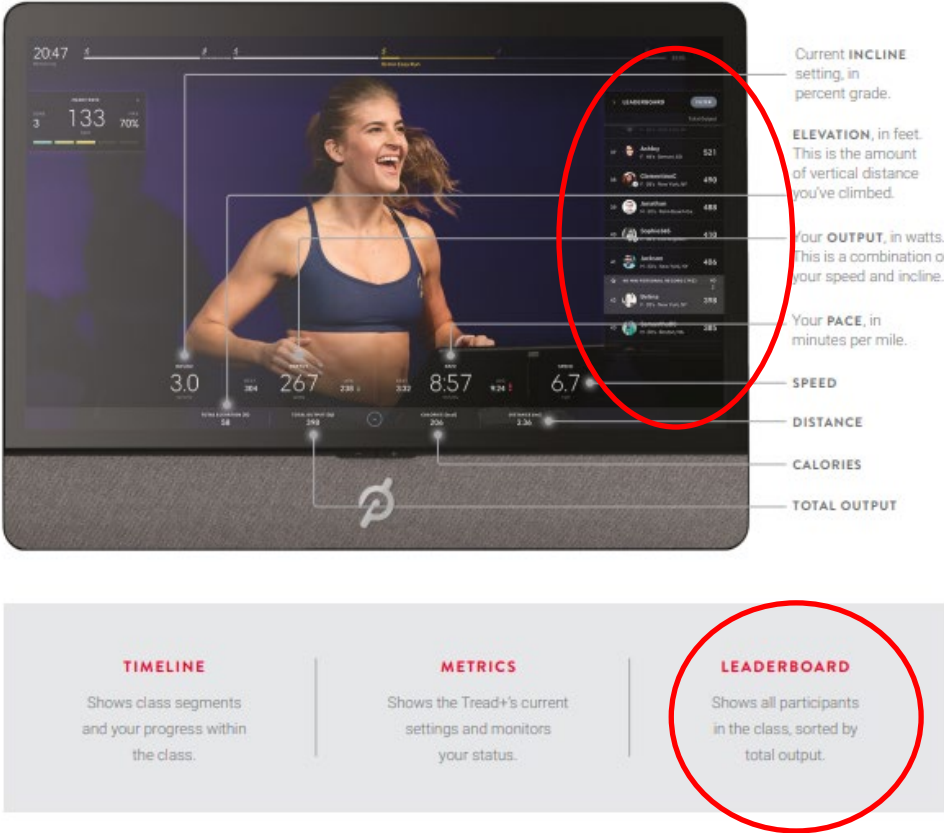
<https://www.onepeloton.com/tread/specs>

The Accused Products’ controller communicates with the current sensor and operating unit to gather exercise use data, including pace, incline, output, and mileage. The Accused Products’ controller then communicates the exercise use data to the communication interface to facilitate the user working out virtually alongside other members who can see at least some of the user’s exercise data, as well as tracking milestones, streaks, and badge awards, via Peloton’s Leaderboard. As such, the Accused Products have a communication interface that is in communication with the controller.

'227 Patent	Peloton's Accused Products
	FEATURES Access to live classes and thousands more on demand Individual profiles for household access (see user requirements) Tread Lock helps prevent unauthorized access ⓘ In-workout metrics like speed, mileage, elevation gain and heart rate Leaderboard to workout alongside other Members Training programs and challenges Workout history, milestone achievements, streaks and badges Special event programming https://www.onepeloton.com/tread https://www.onepeloton.com/tread/specs and

'227 Patent	Peloton's Accused Products
wherein the controller is configured to generate a non-validated exercise use data in response to movement of the operating unit relative to the base and the sensor does not detect engagement of the user with the operating unit,	Once a user steps off the Accused Products' operating unit and the current sensor no longer detects engagement of the user with the operating unit, the Accused Products continue to increment exercise use data, including "Total Output (kJ)", "Distance (mi)", and "Calories (kcal)," for about 5 seconds after a user has stepped off the operating unit. After that, calories continue to be calculated and displayed despite the user still being off the operating unit. Additionally, distance continues to be generated but is not communicated to the communication interface because it is "non-validated" data. This is shown in the pictures below. The first picture shows the "Calories (kcal)" after the sensor does not detect engagement of the user with the operating unit. The second picture shows how the "Calories (kcal)" continue to increase despite the user not being on the operating unit. The second picture was taken approximately 9 seconds after the user stepped off the operating unit. While the distance reflected on the screen does not increase after the user is no longer detected as being on the operating unit, the controller continues to generate distance, but does not report the non-validated distance to the communication interface. As such, the Accused Products' controller generates a non-validated exercise use data (e.g., calories) in response to movement of the operating unit relative to the base and the sensor does not detect engagement of the user with the operating unit. 

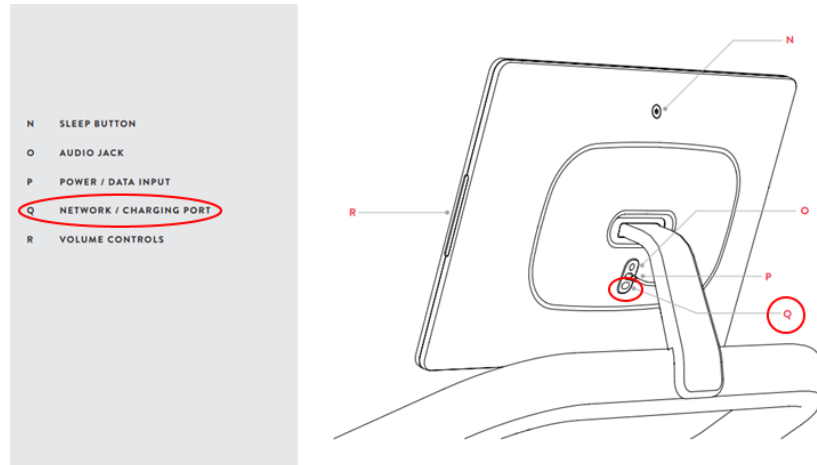
'227 Patent	Peloton's Accused Products
wherein the controller is further configured to generate a validated exercise use data in response to movement of the operating unit relative to the base and the sensor does detect engagement of the user with the operating unit, and	The controller generates validated exercise use data (e.g., Total Output (kJ)) and "Distance (mi)" when a user is detected on the operating unit. This data is considered "validated" because the data is sensed when a user is detected to be in engagement with the operating unit, and the data ceases to be "validated" shortly after a user steps off the operating unit and is no longer detected as being engaged with the operating unit. In the first image below, the user has just started using the Accused Products. In the second image, the user has been on the operating unit for approximately 18 seconds. As shown in the images, several metrics increase due to the user being detected on the operating unit, including but not limited to "Total Output (kJ)," which increased from 123 kJ to 127 kJ (left red circle in second picture) and "Distance (mi)," which increased from .83 miles to .86 miles (right red circle in the second picture). As such, the Accused Products' controller generates a validated exercise use data in response to movement of the operating unit relative to the base and the sensor does detect engagement of the user with the operating unit. 

'227 Patent	Peloton's Accused Products
wherein the controller transmits the validated exercise use data to the communication interface.	The Accused Products' controller communicates validated exercise use data (e.g., "Total Output (kJ)", "Distance (mi)") to the communication interface. As shown in the image below, the Accused Products display Peloton's Leaderboard on the right-hand side of the screen. The Leaderboard (circled below in red) shows all participants in a class and ranks the participants by Total Output (kJ). The Leaderboard also allows users to see where their Total Output (kJ) ranks among all users that have taken the class. Ranking users by Total Output (kJ) on the Leaderboard is only possible because each user's Accused Product transmits the validated exercise use data (Total Output (kJ)) to a communication interface (i.e., internet connectivity options) for transmission to a remote server for subsequent communication to others' exercise devices.  https://support.onepeloton.com/hc/en-us/article_attachments/4401927651860/Peloton_Tread_Plus_User_Manual.pdf

'227 Patent	Peloton's Accused Products
3. The exercise apparatus of claim 1, wherein the validated exercise use data includes a distance traveled by the user while the sensor detects engagement of the user with the operating unit.	The controller generates exercise use data, including "Distance (mi)," when the sensor detects engagement of the user with the operating unit. This data is considered "validated" exercise use data because the data is sensed when a user is detected to be in engagement with the operating unit, and the data ceases to be "validated" shortly after a user steps off the operating unit and is no longer detected as being engaged with the operating unit. In the first image below, the user has just started using the Accused Products. In the second image, the user has been on the operating unit for 18 seconds. As shown in the images, the "Distance (mi)" (red circle in the second picture) increased from .83 miles to .86 miles because the sensor detected the user running on the operating unit. As such, the validated exercise use data includes a distance traveled by the user while the sensor detects engagement of the user with the operating unit.  The images show the Peloton bike's digital display. The top image shows the display with 'DISTANCE (mi)' at 0.83. The bottom image shows the display with 'DISTANCE (mi)' at 0.86, circled in red.

5. The exercise apparatus of claim 1, wherein the communication interface is an internet interface for transmitting the validated exercise use data to a website storage device.

The Accused Products' communication interface includes an internet interface in the form of a network/charging port for internet connectivity (identified as "Q Network/Charging Port" and circled in red in the image below).



https://support.onepeloton.com/hc/en-us/article_attachments/4406174535828/Peloton_Tread_Manual_NA.pdf

The Accused Products also include other internet connectivity options, including Wi-Fi and wireless, as shown in the images below.

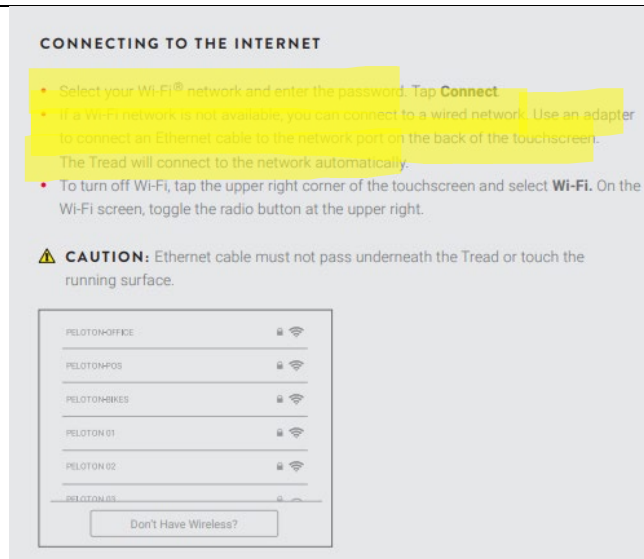
CONNECTION

WiFi 802.11 a/b/g/n/ac - 2.4GHz & 5GHz

ANT+™ wireless

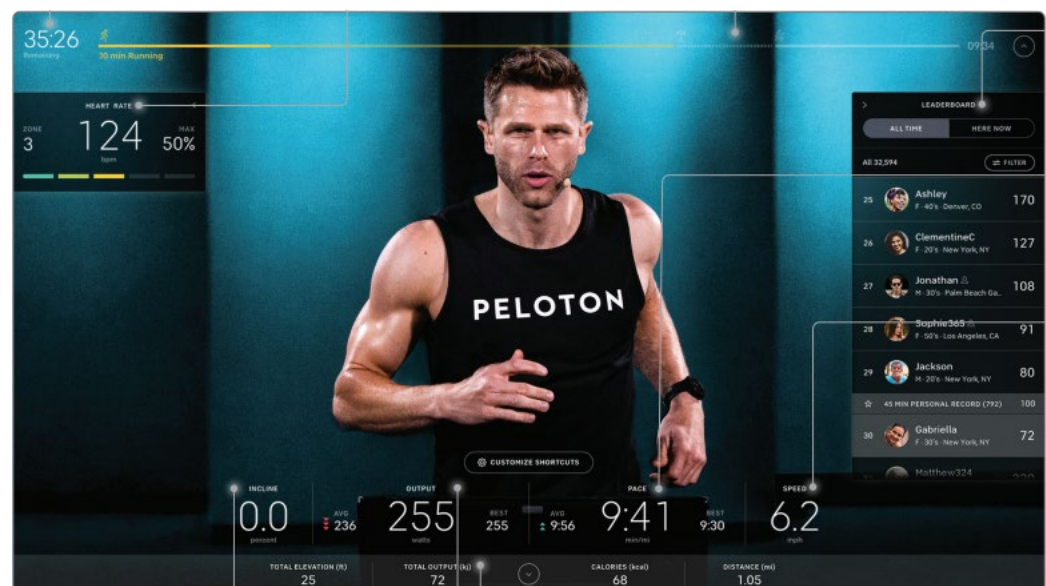
100 Mbps (USB-C to Ethernet adapter only, not included)

<https://www.onepeloton.com/tread/specs>



https://support.onepeloton.com/hc/en-us/article_attachments/4406174535828/Peloton_Tread_Manual_NA.pdf

The Accused Products' communication interface uses its internet interface to transmit the validated exercise use data (e.g., Total Output (kJ)) to Amazon Redshift—Amazon's petabyte-scale cloud data warehouse (<https://aws.amazon.com/blogs/big-data/peloton-embraces-amazon-redshift-to-unlock-the-power-of-data-during-changing-times/>). As shown below, other users' exercise use data (Total Output (kJ)) is then transmitted back to the Accused Products and is displayed on the Leaderboard to facilitate working out virtually alongside other members by ranking the members according to their total output.



'227 Patent	Peloton's Accused Products
	https://support.onepeloton.com/hc/en-us/article_attachments/4406174535828/Peloton_Tread_Manual_NA.pdf As a result, the Accused Products' communication interface is an internet interface for transmitting validated exercise use data to a website storage device.

'227 Patent	Peloton's Accused Products
6. The exercise apparatus of claim 1, wherein the communication interface is a display device for directly showing the validated exercise use data to the user.	The Accused Products' communication interface includes a display device, which Peloton refers to as a touchscreen. https://www.onepeloton.com/tread/specs As shown in the image below, the communication interface directly shows the validated exercise use data (e.g., "Total Output (kJ)", "Distance (mi)" circled in red) to the user. TIME REMAINING Time remaining in the class 35:26 HEART RATE Heart rate is measured when you connect a heart rate monitor 124 bpm TIMELINE Your Timeline shows class segments and your progress within the class LEADERBOARD The Leaderboard shows all participants in a class Filter by Friends, Tags, or users who are Here Now PACE Your current Pace, in minutes per mile 9:41 SPEED Your current Speed 6.2 mph WARNING: Heart rate monitoring systems may be inaccurate. Over-exercising may result in serious injury or death. If you feel faint stop exercising immediately. Use metrics on the screen for reference only. INCLINE Your current Incline, in percent grade 0.0% OUTPUT Your Output, in watts, is a combination of Speed and Incline 255 W TOTAL OUTPUT TOTAL OUTPUT (kJ) 72 TOTAL OUTPUT (mi) 1.05 https://support.onepeloton.com/hc/en-us/article_attachments/4406174535828/Peloton_Tread_Manual_NA.pdf Accordingly, the Accused Products' communication interface is a display device for directly showing the validated exercise use data to the user.

'227 Patent	Peloton's Accused Products
10. The exercise apparatus of claim 1, wherein the sensor includes a current sensor operably connected to the motor, the current sensor is configured to detect an input current into the motor during operation of the operating unit, and wherein the controller is operable to analyze the input current to detect engagement of the user with the operating unit.	"The Accused Products utilize current sensors." See Peloton's Response to Interrogatory No. 10. The current sensor is operably connected to the motor and is configured to detect an input current into the motor while the operating unit is running. Additionally, the Accused Products' controller analyzes the input current detected by the current sensor to detect engagement of the user with the operating unit. In the first image below, the user has just started using the Accused Products. In the second image, the user has been on the operating unit for 18 seconds. As shown in the images, several metrics increase due to the user being detected on the operating unit, including but not limited to "Total Output (kJ)," which increased from 123 kJ to 127 KJ (left red circle in second picture) and "Distance (mi)," which increased from .83 miles to .86 miles (right red circle in the second picture). As a result, the current sensor detects an input current into the motor during operation of the operating unit and the controller analyzes the input current to detect engagement of the user with the operating unit. 

11. The exercise apparatus of claim 10, wherein the controller is configured to analyze a fluctuation in the input current.

The Accused Products' current sensor detects a current change of the input current caused by the user's footfall. The current sensor then transmits the current signal proportional to the input current to the controller. The controller then analyzes the fluctuations in the input current to determine whether a user is still engaged with the operating unit. The user's validated exercise use data is then paused when the controller analyzes the fluctuation in the input current and determines the user is no longer engaged with the operating unit.

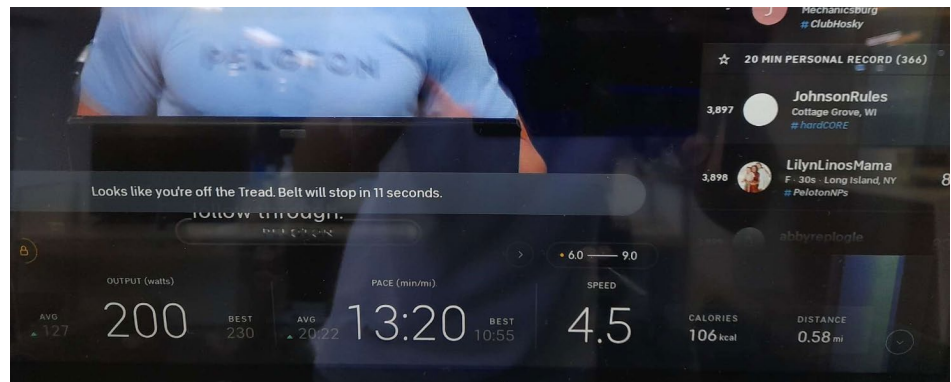
When this occurs, and based on testing, the Accused Products utilize software that (1) turns on a light around the stop button after a user has stepped off the operating unit (about 5 seconds after stepping off), and (2) displays a notification on the screen stating either: "Looks like you're off the Tread. Belt will stop in 11 seconds" or "Your metrics are paused because you're off the tread. Belt will stop in 10 seconds."

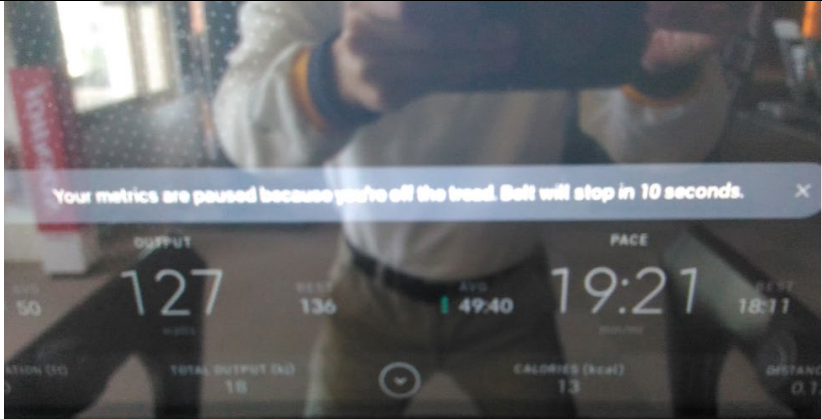


light before stepping off
the Accused Products



light after stepping off
the Accused Products



'227 Patent	Peloton's Accused Products
	 In this way, the Accused Products' controller is configured to analyze a fluctuation in the input current.
14. An exercise apparatus comprising:	The Accused Products are exercise apparatuses.  https://www.onepeloton.com/tread/specs

'227 Patent	Peloton's Accused Products
a base;	The Accused Products include a base (identified by Peloton as a "platform").  https://www.onepeloton.com/tread/specs
an operating unit movable relative to the base;	The Accused Products include an operating unit (i.e. a belt) movable relative to the base. <i>See Peloton's Response to Request for Admission No. 1.</i>  https://www.onepeloton.com/tread/specs

'227 Patent	Peloton's Accused Products
a motor coupled to the operating unit;	The Accused Products utilize a "3 HP DC" motor that is coupled to the operating unit to simulate running speeds from "0 to 12.5 mph with 0.1 mph increments." PERFORMANCE Speed: 0 to 12.5 mph with 0.1 mph increments Incline: 0 to 12.5% grade with 0.5% increments Motor: 3 HP DC Screen adjustment: 0 - 50 deg vertical tilt, does not rotate horizontally Power rating: 120Vac, 60Hz, 12A https://www.onepeloton.com/tread/specs

a sensor operable to detect engagement of a user with the operating unit;

“The Accused Products utilize current sensors” to detect user engagement with the operating unit. *See Peloton’s Response to Interrogatory No. 10.*

Additionally, Peloton’s website states that “the belt on [the Accused Products] will come to a stop if it has been set to a speed above 0 mph and it does not detect a person running.”

Please note that even if you are in a class, the belt on your Peloton Tread or Peloton Tread+ will come to a stop if it has been set to a speed above 0 mph and it does not detect a person running.

<https://support.onepeloton.com/hc/en-us/articles/360060884531-Tread-Lock>

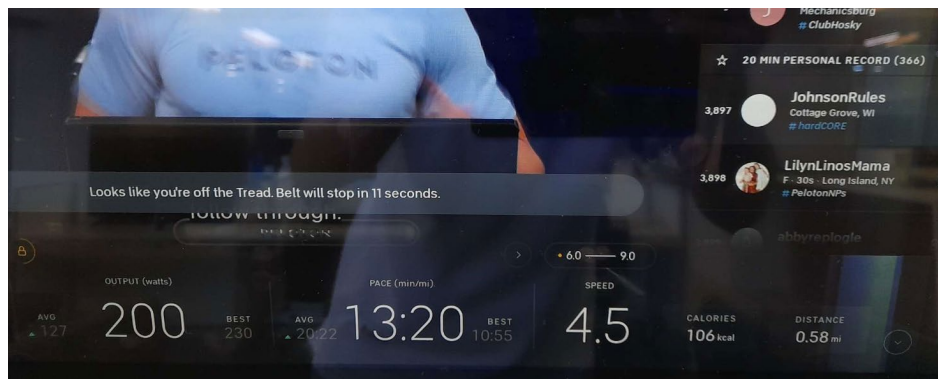
Based on testing, the Accused Products utilize software that (1) turns on a light around the stop button after a user has stepped off the operating unit (about 5 seconds after stepping off), and (2) displays a notification on the screen stating either: “Looks like you’re off the Tread. Belt will stop in 11 seconds” or “Your metrics are paused because you’re off the tread. Belt will stop in 10 seconds.”

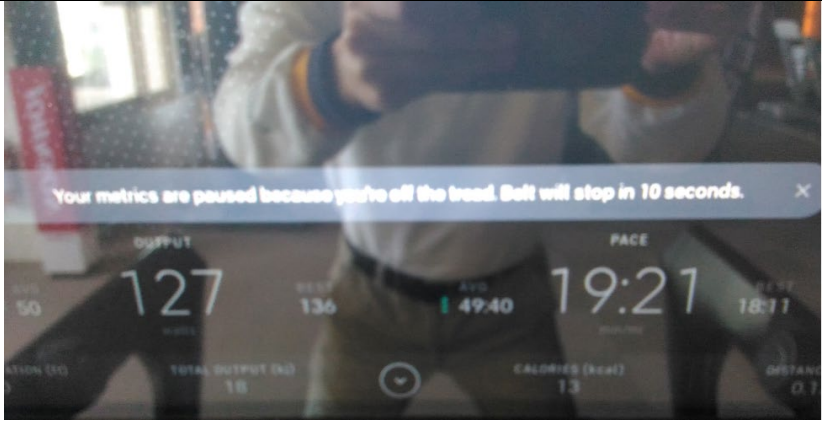


light before stepping off the Accused Products



light after stepping off the Accused Products



'227 Patent	Peloton's Accused Products
	 In order to detect a person running, the Accused Products have a sensor that is operable to detect engagement of a user with the operating unit.
a controller in communication with the operating unit and the sensor; and	The Accused Products utilize a controller. <i>See Peloton's Response to Request for Admission No. 9.</i> The Accused Products' controller is capable of communicating with a current sensor and the operating unit. <i>See Peloton's Response to Request for Admission Nos. 11 and 13.</i>

a communication interface in communication with the controller,

The Accused Products have several communication interfaces, including a touchscreen. <https://www.onepeloton.com/tread/specs>



The Accused Products also utilize a communication interface in the form of internet connectivity options. Such options include “WiFi 802.11 a/b/g/n/ac – 2.4 GHz & 5GHz,” “ANT+ wireless,” and “100 Mbps (USB-C to Ethernet adapter only)” as shown in the image below.

CONNECTION

WiFi 802.11 a/b/g/n/ac - 2.4GHz & 5GHz

ANT+™ wireless

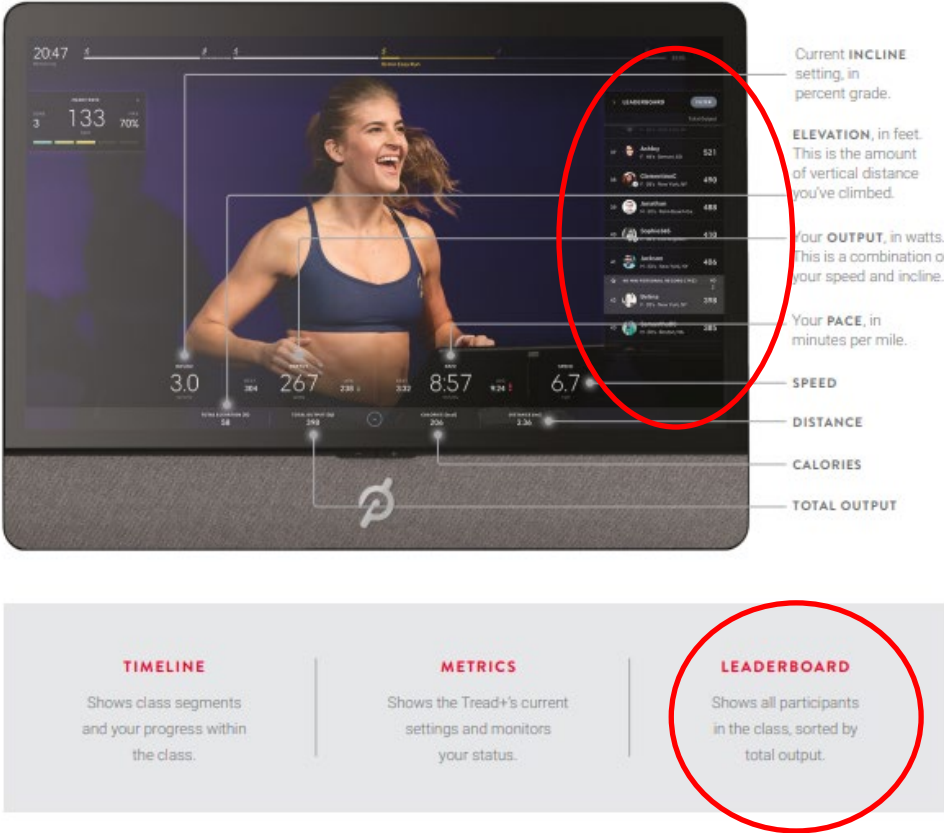
100 Mbps (USB-C to Ethernet adapter only, not included)

<https://www.onepeloton.com/tread/specs>

The Accused Products’ controller communicates with the current sensor and operating unit to gather exercise use data, including pace, incline, output, and mileage. The Accused Products’ controller then communicates the exercise use data to the communication interface to facilitate the user working out virtually alongside other members who can see at least some of the user’s exercise data, as well as tracking milestones, streaks, and badge awards, via Peloton’s Leaderboard. As such, the Accused Products have a communication interface that is in communication with the controller.

'227 Patent	Peloton's Accused Products
	FEATURES Access to live classes and thousands more on demand Individual profiles for household access (see user requirements) Tread Lock helps prevent unauthorized access ⓘ In-workout metrics like speed, mileage, elevation gain and heart rate Leaderboard to workout alongside other Members Training programs and challenges Workout history, milestone achievements, streaks and badges Special event programming https://www.onepeloton.com/tread https://www.onepeloton.com/tread/specs and

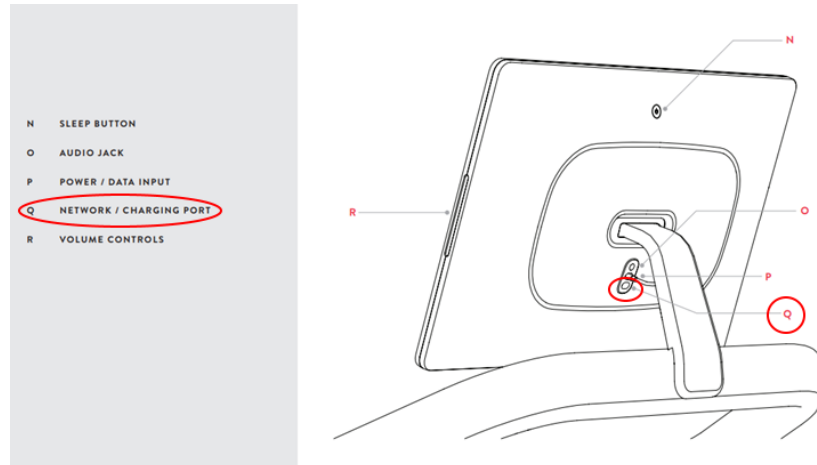
'227 Patent	Peloton's Accused Products
wherein the controller is configured to generate a validated exercise use data in response to the operating unit moving relative to the base and the sensor detecting engagement of the user with the operating unit, and	The controller generates validated exercise use data (e.g., Total Output (kJ)) and "Distance (mi)" when a user is detected on the operating unit. This data is considered "validated" because the data is sensed when a user is detected to be in engagement with the operating unit, and the data ceases to be "validated" shortly after a user steps off the operating unit and is no longer detected as being engaged with the operating unit. In the first image below, the user has just started using the Accused Products. In the second image, the user has been on the operating unit for approximately 18 seconds. As shown in the images, several metrics increase due to the user being detected on the operating unit, including but not limited to "Total Output (kJ)," which increases from 123 kJ to 127 kJ (left red circle in second picture) and "Distance (mi)," which increases from .83 miles to .86 miles (right red circle in the second picture). As such, the Accused Products' controller generates a validated exercise use data in response to movement of the operating unit relative to the base and the sensor does detect engagement of the user with the operating unit. 

'227 Patent	Peloton's Accused Products
wherein the controller transmits the validated exercise use data to the communication interface.	The Accused Products' controller communicates validated exercise use data (e.g., "Total Output (kJ)", "Distance (mi)") to the communication interface. As shown in the image below, the Accused Products display Peloton's Leaderboard on the right-hand side of the screen. The Leaderboard (circled below in red) shows all participants in a class and ranks the participants by Total Output (kJ). The Leaderboard also allows users to see where their Total Output (kJ) ranks among all users that have taken the class. Ranking users by Total Output (kJ) on the Leaderboard is only possible because each user's Accused Product transmits the validated exercise use data (Total Output (kJ)) to a communication interface (i.e., internet connectivity options) for transmission to a remote server for subsequent communication to others' exercise devices.  https://support.onepeloton.com/hc/en-us/article_attachments/4401927651860/Peloton_Tread_Plus_User_Manual.pdf

'227 Patent	Peloton's Accused Products
16. The exercise apparatus of claim 14, wherein the validated exercise use data includes a distance traveled by the user while the sensor detects engagement of the user with the operating unit.	The controller generates exercise use data, including "Distance (mi)," when the sensor detects engagement of the user with the operating unit. This data is considered "validated" exercise use data because the data is sensed when a user is detected to be in engagement with the operating unit, and the data ceases to be "validated" shortly after a user steps off the operating unit and is no longer detected as being engaged with the operating unit. In the first image below, the user has just started using the Accused Products. In the second image, the user has been on the operating unit for 18 seconds. As shown in the images, the "Distance (mi)" (red circle in the second picture) increases from .83 miles to .86 miles because the sensor detected the user running on the operating unit. As such, the validated exercise use data includes a distance traveled by the user while the sensor detects engagement of the user with the operating unit.  The images show the Peloton bike's digital display. The top image shows the display with 'DISTANCE (mi)' at 0.83. The bottom image shows the display with 'DISTANCE (mi)' at 0.86, which is circled in red.

18. The exercise apparatus of claim 14, wherein the communication interface is an internet interface for transmitting the validated exercise use data to a website storage device.

The Accused Products' communication interface includes an internet interface in the form of a network/charging port for internet connectivity (identified as "Q Network/Charging Port" and circled in red in the image below).



https://support.onepeloton.com/hc/en-us/article_attachments/4406174535828/Peloton_Tread_Manual_NA.pdf

The Accused Products also include other internet connectivity options, including Wi-Fi and wireless, as shown in the images below.

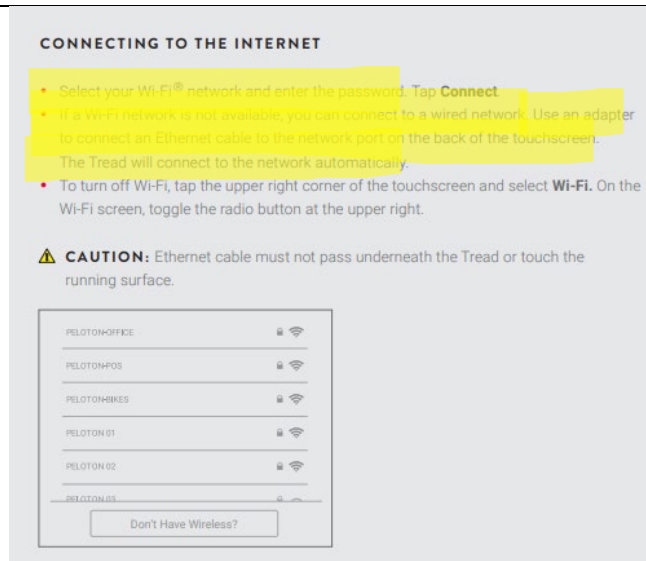
CONNECTION

WiFi 802.11 a/b/g/n/ac - 2.4GHz & 5GHz

ANT+™ wireless

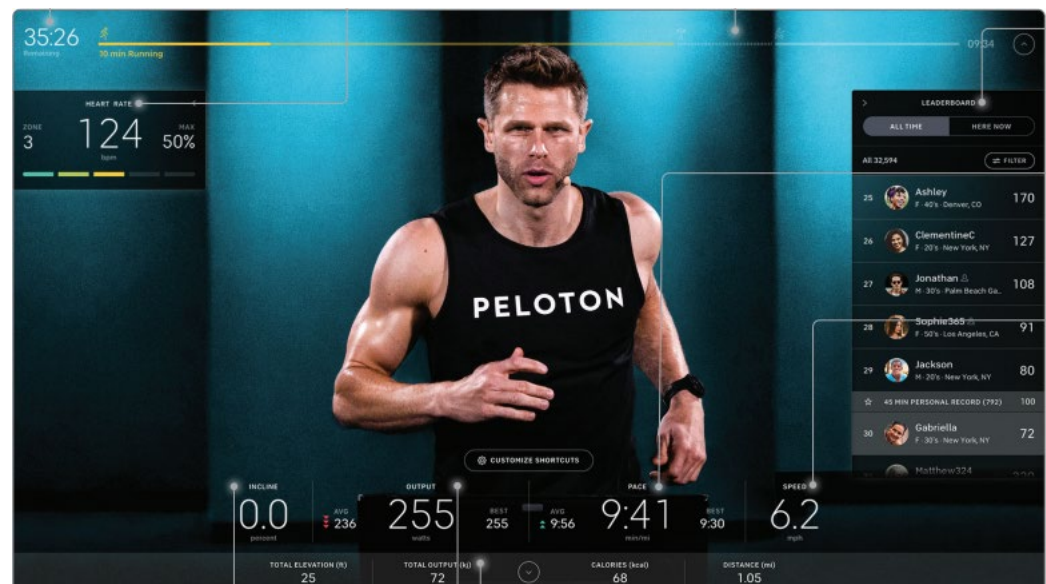
100 Mbps (USB-C to Ethernet adapter only, not included)

<https://www.onepeloton.com/tread/specs>



https://support.onepeloton.com/hc/en-us/article_attachments/4406174535828/Peloton_Tread_Manual_NA.pdf

The Accused Products' communication interface uses its internet interface to transmit the validated exercise use data (e.g., Total Output (kJ)) to Amazon Redshift – Amazon's petabyte-scale cloud data warehouse (<https://aws.amazon.com/blogs/big-data/peloton-embraces-amazon-redshift-to-unlock-the-power-of-data-during-changing-times/>). As shown below, other users' exercise use data (Total Output (kJ)) is then transmitted back to the Accused Products and is displayed on the Leaderboard to facilitate working out virtually alongside other members by ranking the members according to their total output.



'227 Patent	Peloton's Accused Products
	https://support.onepeloton.com/hc/en-us/article_attachments/4406174535828/Peloton_Tread_Manual_NA.pdf As a result, the Accused Products' communication interface is an internet interface for transmitting validated exercise use data to a website storage device.

'227 Patent	Peloton's Accused Products
19. The exercise apparatus of claim 14, wherein the communication interface is a display device for directly showing the validated exercise use data to the user.	The Accused Products' communication interface includes a display device, which Peloton refers to as a touchscreen. https://www.onepeloton.com/tread/specs As shown in the image below, the communication interface directly shows the validated exercise use data (e.g., "Total Output (kJ)", "Distance (mi)" circled in red) to the user. TIME REMAINING Time remaining in the class 35:26 HEART RATE Heart rate is measured when you connect a heart rate monitor 124 TIMELINE Your Timeline shows class segments and your progress within the class LEADERBOARD The Leaderboard shows all participants in a class Filter by Friends, Tags, or users who are Here Now PACE Your current Pace, in minutes per mile 9:41 SPEED Your current Speed 6.2 WARNING: Heart rate monitoring systems may be inaccurate. Over-exercising may result in serious injury or death. If you feel faint stop exercising immediately. Use metrics on the screen for reference only. INCLINE Your current Incline, in percent grade 0.0 OUTPUT Your Output, in watts, is a combination of Speed and Incline 255 TOTAL OUTPUT TOTAL OUTPUT (kJ) 255 TOTAL OUTPUT (mi) 1.05 https://support.onepeloton.com/hc/en-us/article_attachments/4406174535828/Peloton_Tread_Manual_NA.pdf Accordingly, the Accused Products' communication interface is a display device for directly showing the validated exercise use data to the user.

'227 Patent	Peloton's Accused Products
20. The exercise apparatus of claim 14, wherein the sensor is one of a current sensor, an optical sensor, a pressure sensor, and a thermal sensor.	"The Accused Products utilize current sensors." <i>See</i> Peloton's Response to Interrogatory No. 10.