

FILED UNDER SEAL

EXHIBIT 15a

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

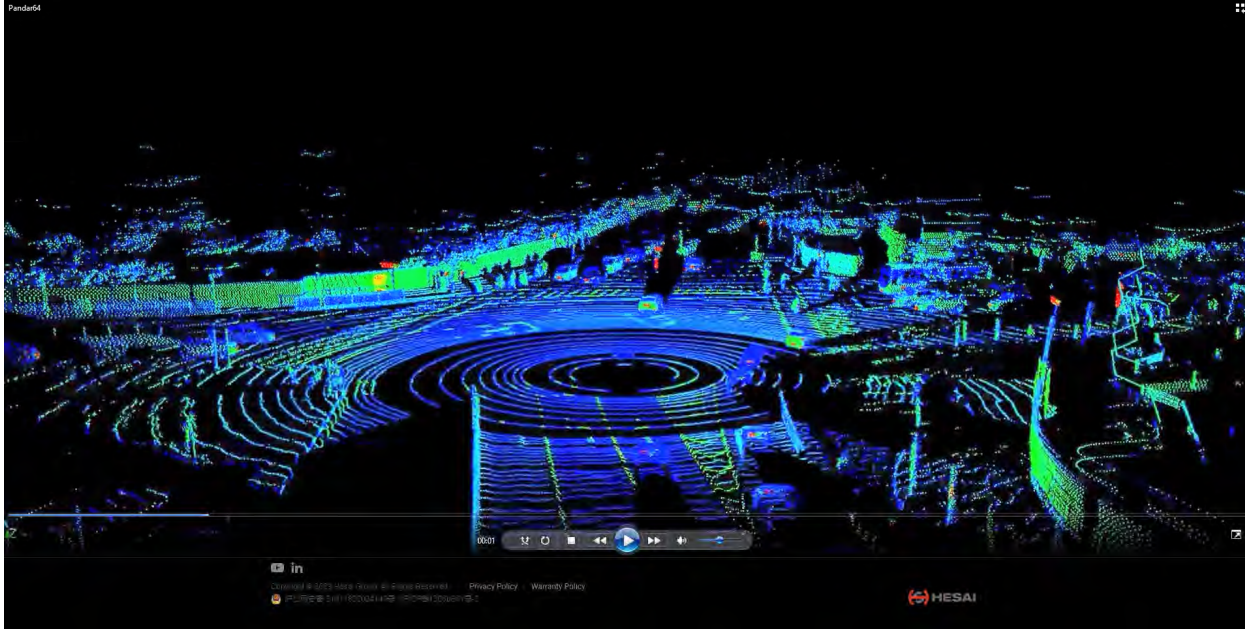
US 11,287,515	PandarQT
Claim 14	
14[pre] A light ranging system comprising:	PandarQT includes a light ranging system based on time-of-flight measurements: This manual describes the specifications, installation, and data format of PandarQT. 1.1 Operating Principle Distance Measurement: Time of Flight (ToF) 1) A laser diode emits a beam of ultrashort laser pulses onto the target object. 2) The laser pulses are reflected after hitting the target object. The returning beam is detected by an optical sensor. 3) Distance to the object can be accurately measured by calculating the time between laser emission and receipt. $d = \frac{ct}{2}$ d: distance c: speed of light t: travel time of the laser beam Figure 1.1 Distance Measurement Using Time of Flight Ex. 25 (“PandarQT 64-Channel User Manual (Apr. 2022)”) at 10

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

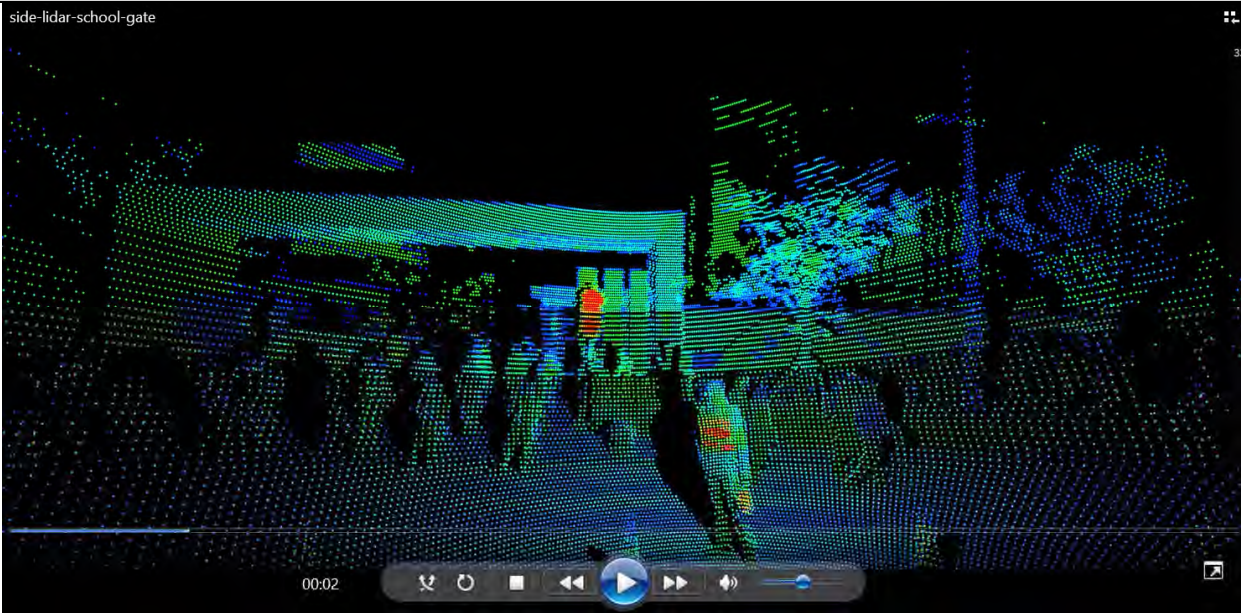
US 11,287,515	PandarQT
	This manual describes the specifications, installation, and data format of QT128C2X. 1.1 Operating Principle Distance Measurement: Time of Flight (ToF) 1) A laser diode emits a beam of ultrashort laser pulses onto the target object. 2) The laser pulses are reflected after hitting the target object. The returning beam is detected by an optical sensor. 3) Distance to the object can be accurately measured by calculating the time between laser emission and receipt. $d = \frac{ct}{2}$ d; distance c; speed of light t: travel time of the laser beam Figure 1.1 Distance Measurement Using Time of Flight Ex. 26 (“QT128C2X User Manual (Aug. 2022)”) at 10

CONFIDENTIAL BUSINESS INFORMATION

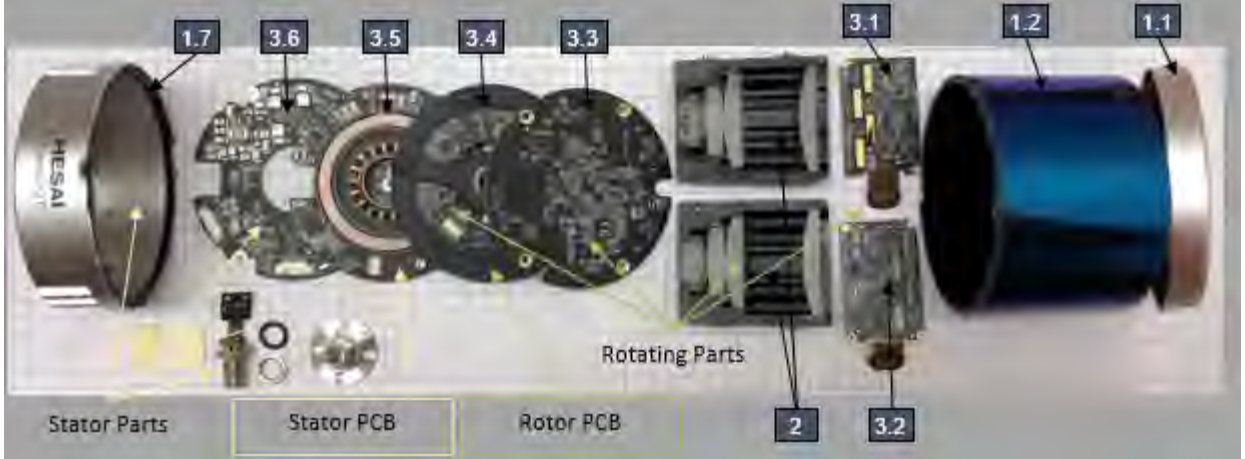
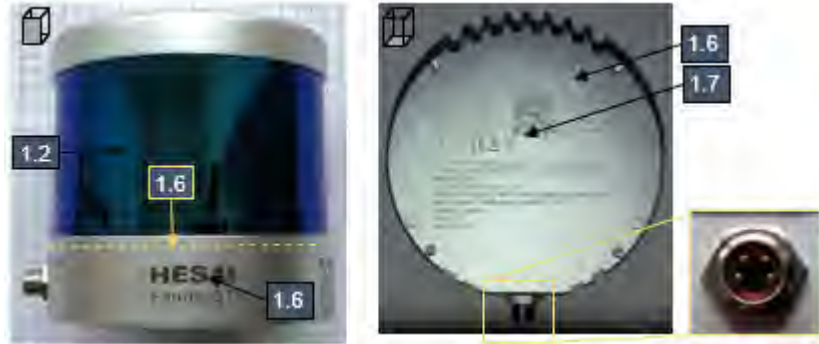
Preliminary infringement chart of U.S. 11,287,515 against PandarQT

US 11,287,515	PandarQT
	 PandarQT 64-Channel Point Cloud Video, available at: https://www.hesaitech.com/product_downloads/pandar64-4/point-cloud-download/

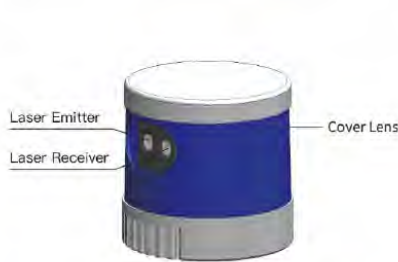
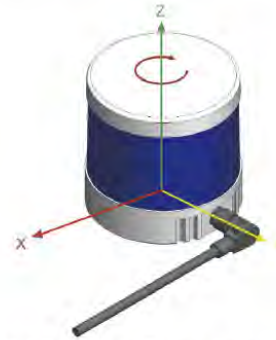
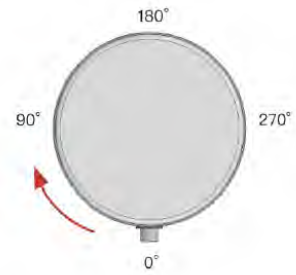
CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

US 11,287,515	PandarQT
	 side-lidar-school-gate QT128 Point Cloud Video, available at: https://www.hesaitech.com/product_downloads/qt128/point-cloud-download/
[14a] an enclosure having a base, a top cover and an optically transparent window disposed between the base and the top cover and extending fully around a periphery of the enclosure;	PandarQT includes an enclosure having a base (<i>e.g.</i> , 1.6 and/or 1.7), a top cover (<i>e.g.</i> , 1.1) and an optically transparent window (<i>e.g.</i> , 1.2) disposed between the base and the top cover and extending fully around a periphery of the enclosure.

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

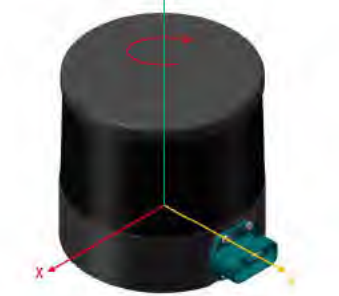
US 11,287,515	PandarQT
	 Ex. 30 ("PandarQT Teardown")  PandarQT Teardown

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

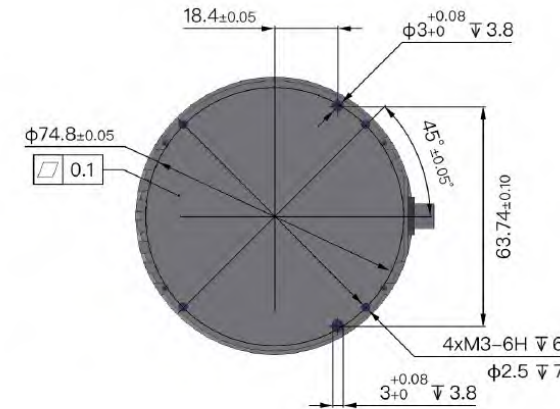
US 11,287,515	PandarQT
	1.2 Lidar Structure Laser emitters and receivers are attached to a motor that rotates horizontally.    Figure 1.2 Partial Cross-Sectional Diagram Figure 1.3 Coordinate System (Isometric View) Figure 1.4 Default Rotation Direction (Top View) The lidar's coordinate system is illustrated in Figure 1.3. Z-axis is the axis of rotation. By default, the lidar rotates clockwise in the top view. To select counterclockwise rotation, see Section 4.2 (Web Control - Settings). The origin is shown as a red dot in Figure 1.6 on the next page. All measurements are relative to the origin. PandarQT 64-Channel User Manual (Apr. 2022) at 11

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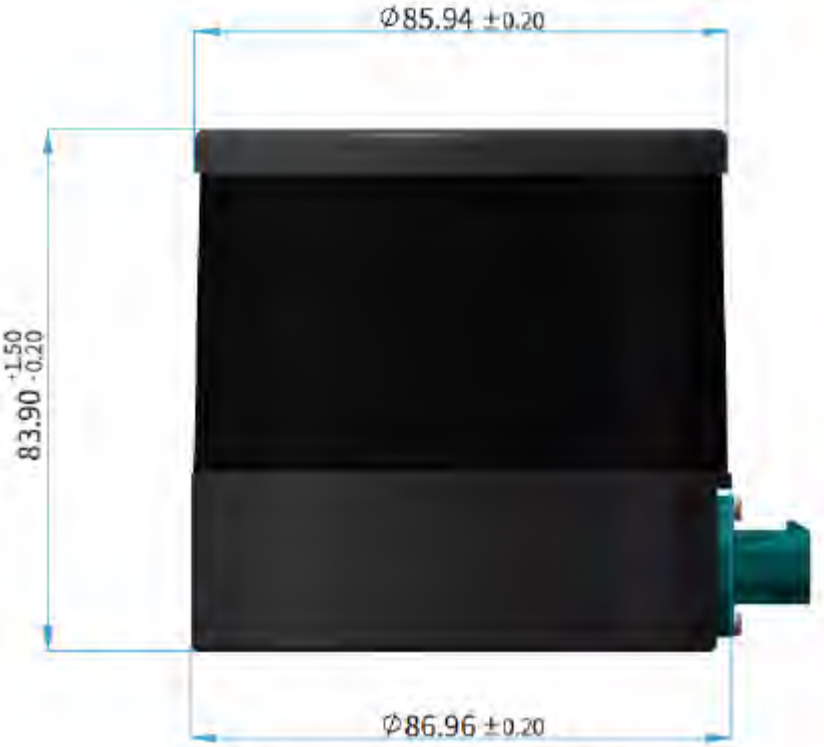
Preliminary infringement chart of U.S. 11,287,515 against PandarQT

US 11,287,515	PandarQT
	 Figure 1.2 Partial Cross-Sectional Diagram  Figure 1.3 Coordinate System (Isometric View)  Figure 1.4 Default Rotation Direction (Top View) QT128C2X User Manual (Aug. 2022) at 11

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

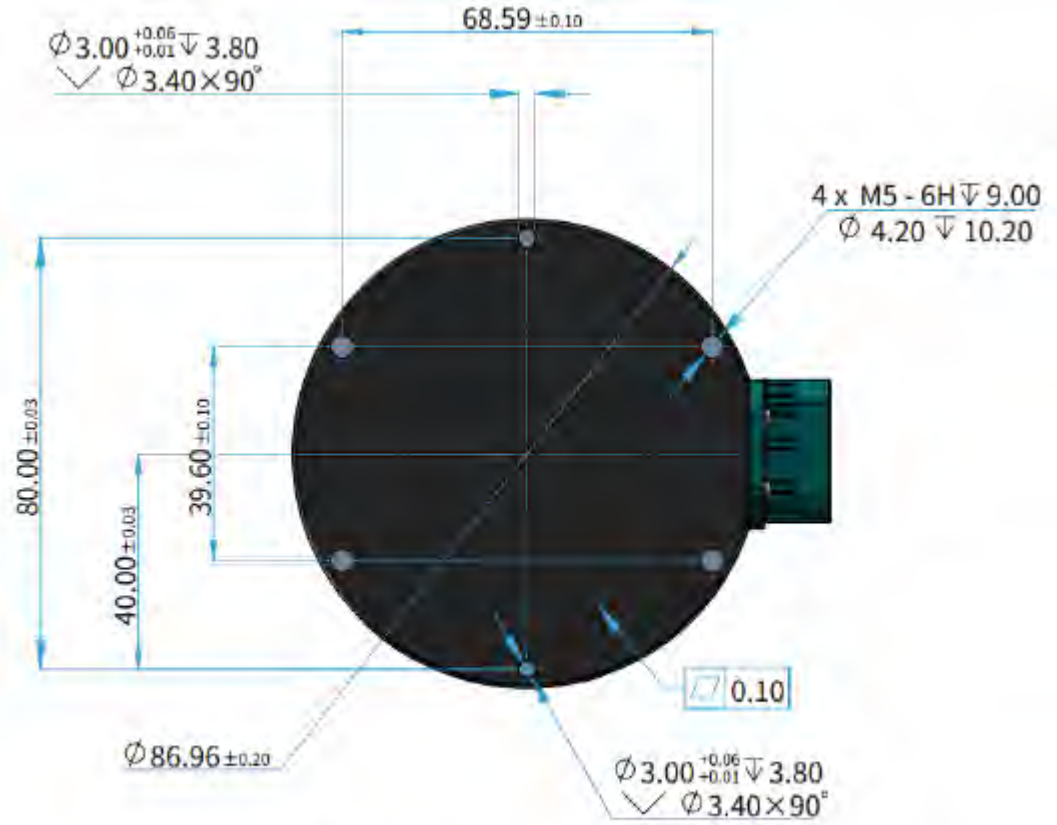
US 11,287,515	PandarQT
	2.1 Mechanical Installation  Figure 2.1 Isometric View (Unit: mm)  Figure 2.2 Mounting Base (Unit: mm) PandarQT 64-Channel User Manual (Apr. 2022) at 15

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

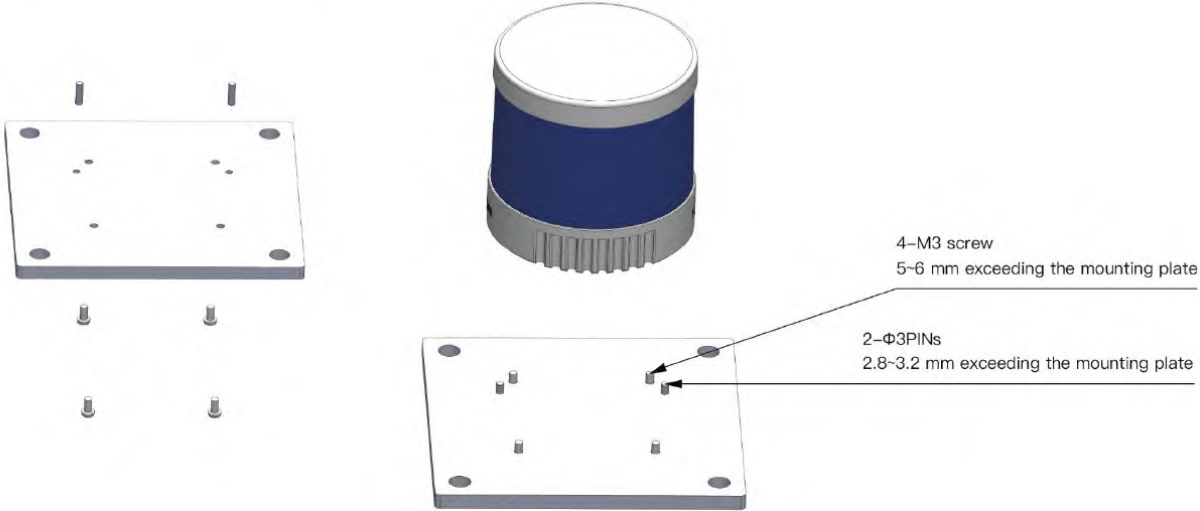
US 11,287,515	PandarQT
	 Figure 2.1 Left View (Unit: mm) QT128C2X User Manual (Aug. 2022) at 16

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Preliminary infringement chart of U.S. 11,287,515 against PandarQT

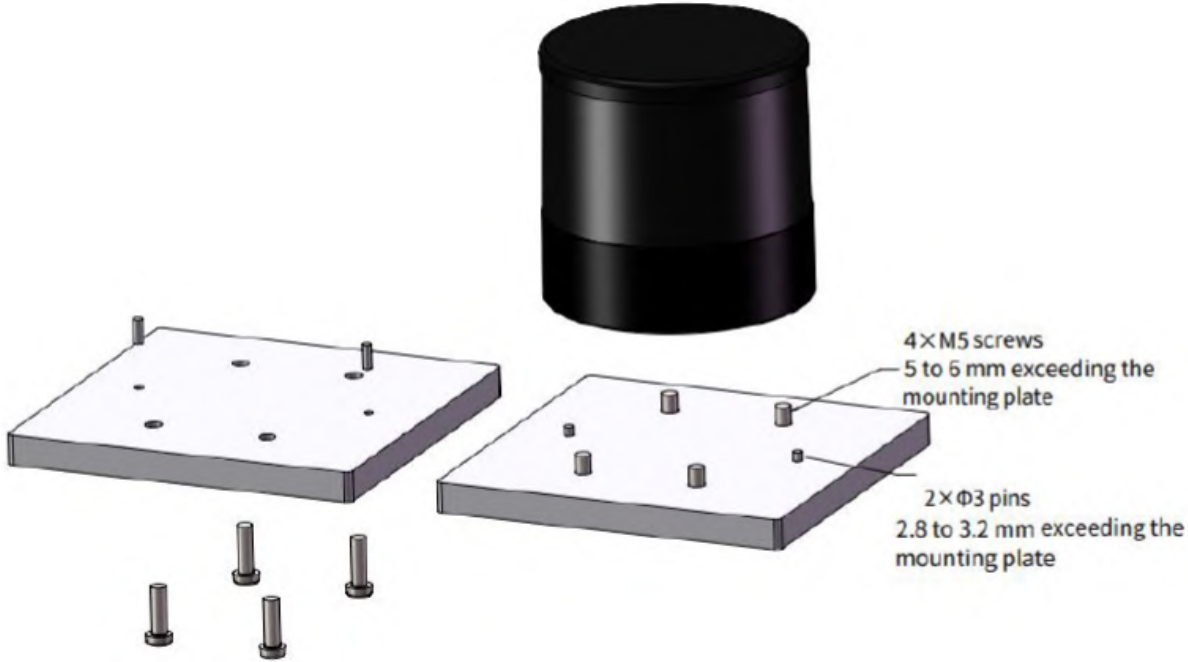
US 11,287,515	PandarQT
	 Technical drawing of a circular mounting base (Unit: mm). The drawing shows a circular base with a diameter of $\phi 86.96 \pm 0.20$. Key dimensions and features include: - Top hole diameter: $\phi 3.00^{+0.06}_{+0.01} \downarrow 3.80$ with a $\phi 3.40 \times 90^\circ$ chamfer. - Top hole spacing: 68.59 ± 0.10. - Four mounting holes: $4 \times M5 - 6H \downarrow 9.00$ with a diameter of $\phi 4.20 \downarrow 10.20$. - Left side hole spacing: 80.00 ± 0.03 (total) and 40.00 ± 0.03 (half). - Right side hole spacing: 39.60 ± 0.10. - Bottom hole diameter: $\phi 3.00^{+0.06}_{+0.01} \downarrow 3.80$ with a $\phi 3.40 \times 90^\circ$ chamfer. - Surface texture: 0.10. Figure 2.2 Mounting Base (Unit: mm) QT128C2X User Manual (Aug. 2022) at 17

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

US 11,287,515	PandarQT
	2.1.1 Recommended Installation  Figure 2.3 Recommended Installation PandarQT 64-Channel User Manual (Apr. 2022) at 16

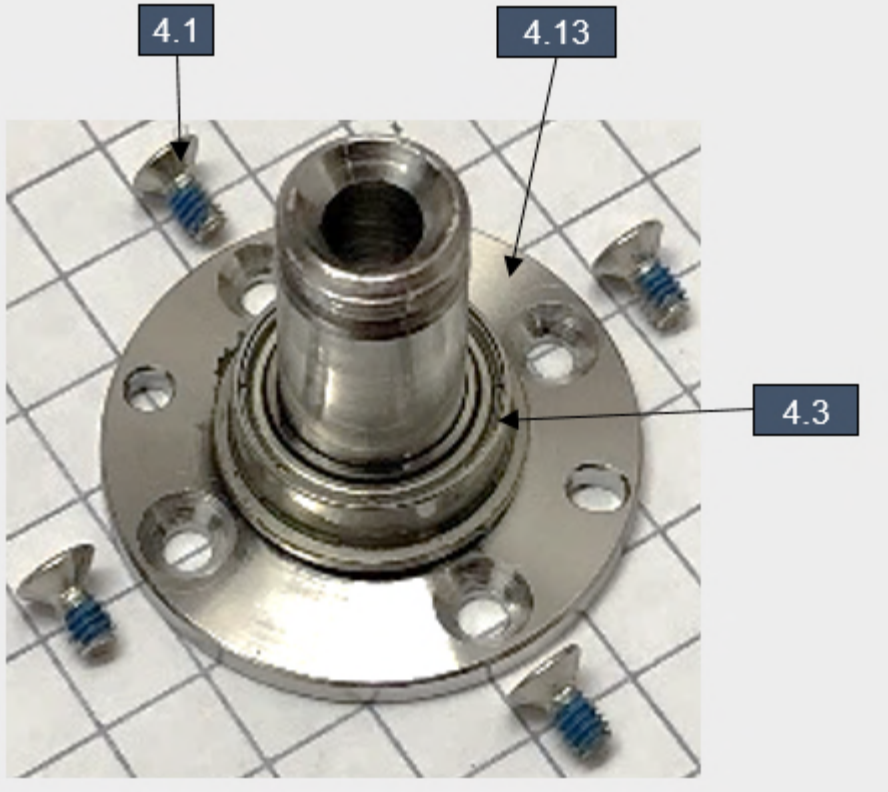
CONFIDENTIAL BUSINESS INFORMATION

Preliminary infringement chart of U.S. 11,287,515 against PandarQT

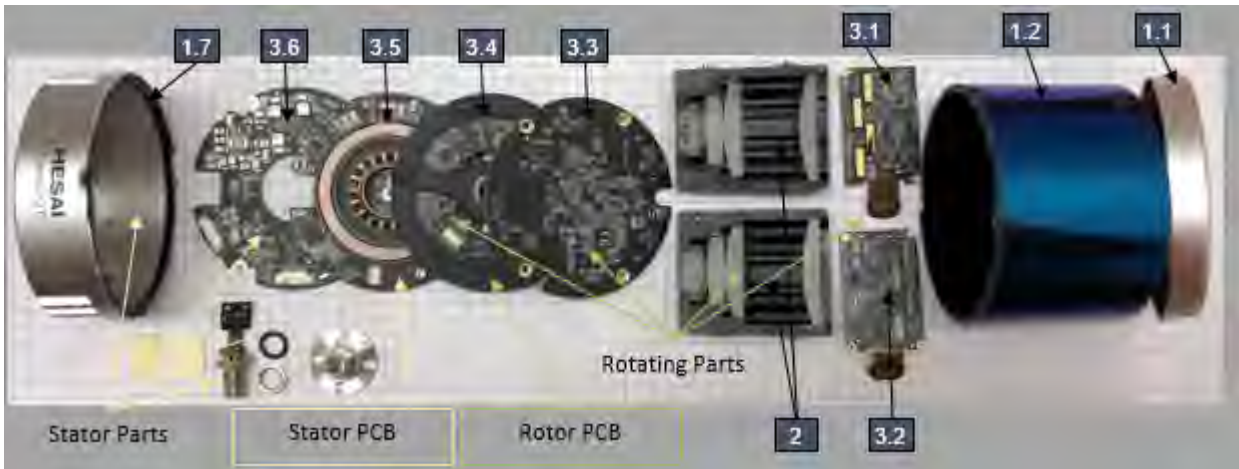
US 11,287,515	PandarQT
	 Figure 2.3 Recommended Installation QT128C2X User Manual (Aug. 2022) at 18
[14b] a shaft disposed within the enclosure and defining an axis of rotation;	PandarQT includes a shaft (<i>e.g.</i> , 4.13) disposed within the enclosure and defining an axis of rotation.

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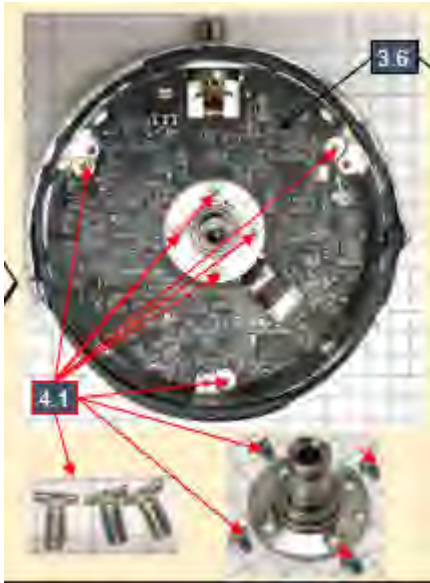
Preliminary infringement chart of U.S. 11,287,515 against PandarQT

US 11,287,515	PandarQT
	 PandarQT Teardown

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

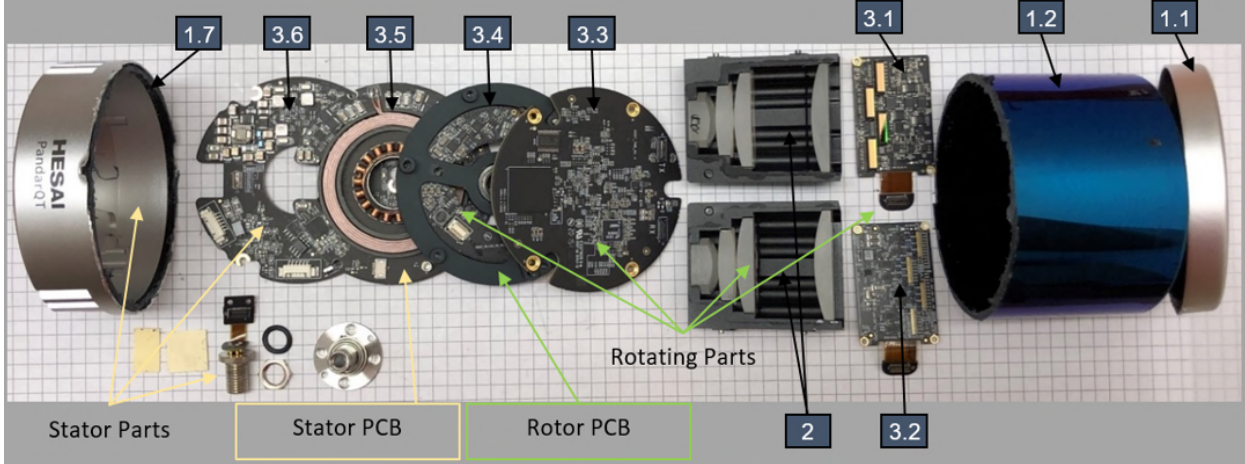
US 11,287,515	PandarQT
	 PandarQT Teardown  PandarQT Teardown

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

US 11,287,515	PandarQT
	 PandarQT Teardown
[14c] a stator circuit board disposed within the enclosure along a first plane perpendicular to the axis of rotation and fixedly coupled to the base of the enclosure;	PandarQT includes a stator circuit board (<i>e.g.</i>, circuitry around outside of 3.5) disposed within the enclosure along a first plane perpendicular to the axis of rotation and fixedly coupled to the base of the enclosure (<i>e.g.</i>, 1.6 and/or 1.7).

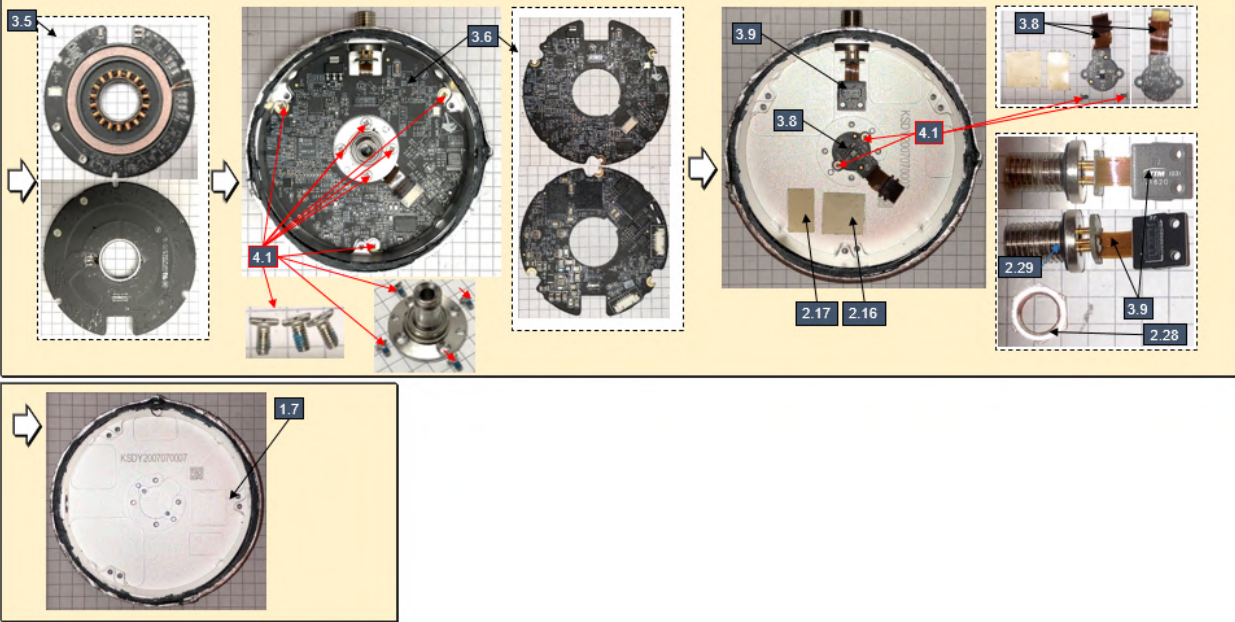
CONFIDENTIAL BUSINESS INFORMATION

Preliminary infringement chart of U.S. 11,287,515 against PandarQT

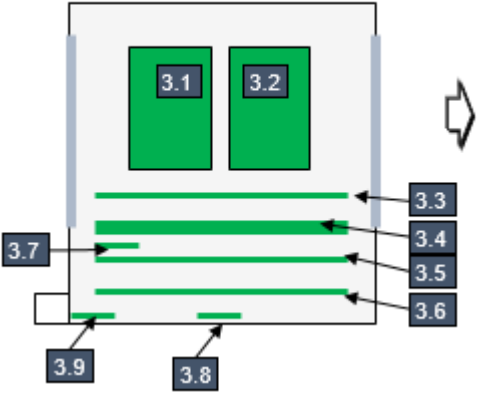
US 11,287,515	PandarQT
	 PandarQT Teardown

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Preliminary infringement chart of U.S. 11,287,515 against PandarQT

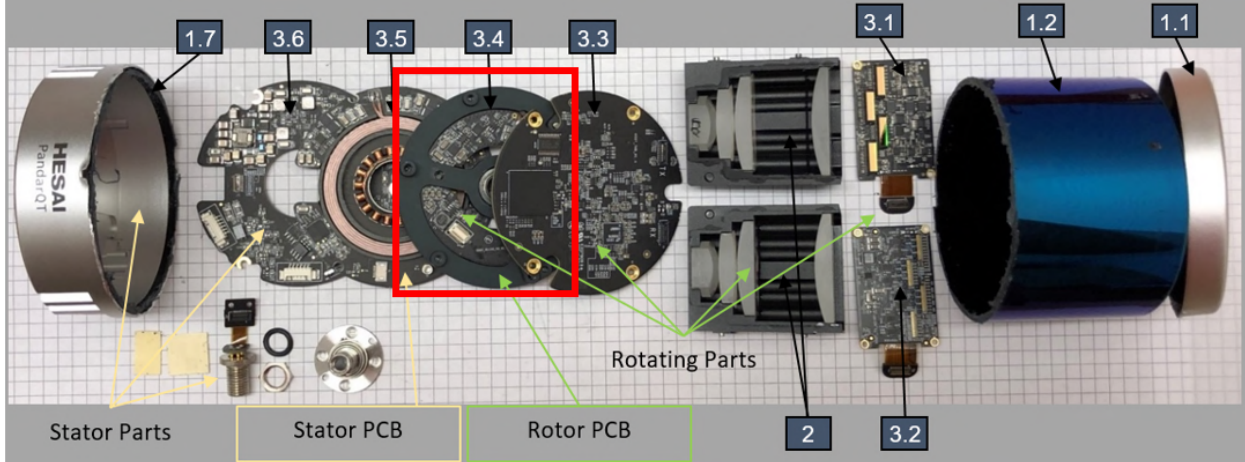
US 11,287,515	PandarQT
	 PandarQT Teardown

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

US 11,287,515	PandarQT
	Schematic of PCB arrangement  PandarQT Teardown
[14d] a support component comprising a sleeve fitted over the shaft and a plurality of arms extending away from the sleeve;	PandarQT includes a support component (<i>e.g.</i> , 4.6) comprising a sleeve fitted over the shaft and a plurality of arms extending away from the sleeve (<i>e.g.</i> , the three arms extending away from the center in 4.6).

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Preliminary infringement chart of U.S. 11,287,515 against PandarQT

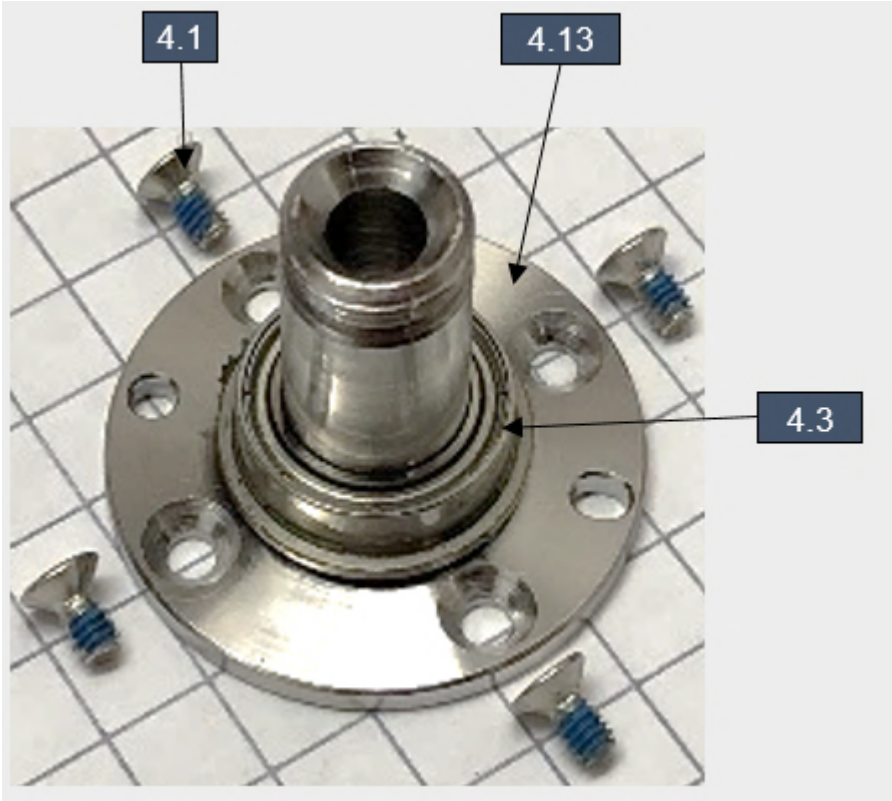
US 11,287,515	PandarQT
	 PandarQT Teardown (emphasis added)  PandarQT Teardown

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

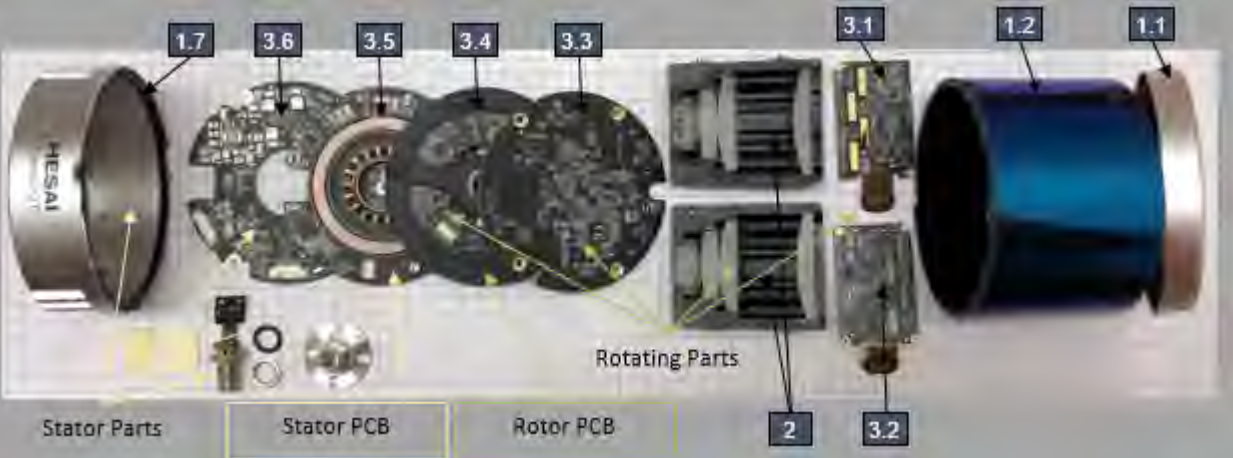
US 11,287,515	PandarQT												
	 PandarQT Teardown												
[14e] one or more bearings coupled between the shaft and the support component allowing the support component to rotate around the axis of rotation;	PandarQT includes one or more bearings (<i>e.g.</i>, any of 4.2 and 4.5, either alone or in combination) coupled between the shaft (<i>e.g.</i>, 4.13) and the support component (<i>e.g.</i>, 4.6) allowing the support component to rotate around the axis of rotation. <table border="1"> <thead> <tr> <th>4</th><th>Mechanical Parts of Rotor PCB</th></tr> </thead> <tbody> <tr> <td>4.1</td><td>18 Screw M2</td></tr> <tr> <td>4.2</td><td>1 Lock Nut Rotor Ball-Bearing</td></tr> <tr> <td>4.3</td><td>1 Stator Ball-Bearing</td></tr> <tr> <td>4.4</td><td>2 Fitting Pin</td></tr> <tr> <td>4.5</td><td>1 Ball-Bearing Rotor</td></tr> </tbody> </table> PandarQT Teardown	4	Mechanical Parts of Rotor PCB	4.1	18 Screw M2	4.2	1 Lock Nut Rotor Ball-Bearing	4.3	1 Stator Ball-Bearing	4.4	2 Fitting Pin	4.5	1 Ball-Bearing Rotor
4	Mechanical Parts of Rotor PCB												
4.1	18 Screw M2												
4.2	1 Lock Nut Rotor Ball-Bearing												
4.3	1 Stator Ball-Bearing												
4.4	2 Fitting Pin												
4.5	1 Ball-Bearing Rotor												

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Preliminary infringement chart of U.S. 11,287,515 against PandarQT

US 11,287,515	PandarQT
	 PandarQT Teardown

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

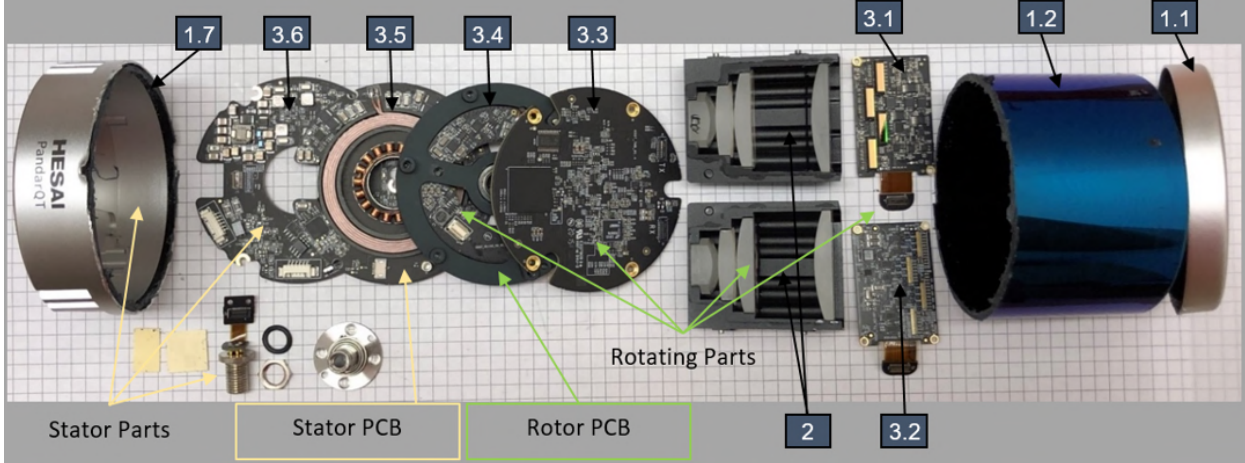
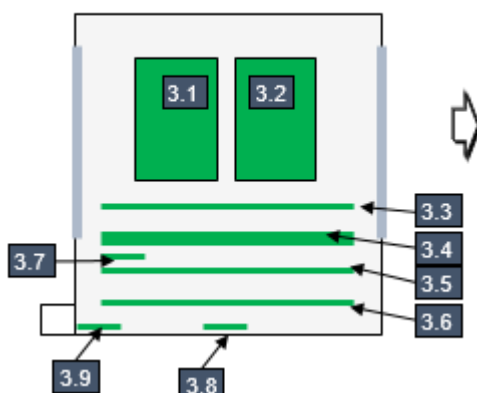
US 11,287,515	PandarQT
	 PandarQT Teardown 

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

US 11,287,515	PandarQT
	PandarQT Teardown  PandarQT Teardown
[14f] a rotor circuit board coupled to rotate with the support component and disposed within the enclosure along a second plane parallel to the first plane and between the first plane and the top cover;	PandarQT includes a rotor circuit board (<i>e.g.</i>, 3.4 and/or 3.3) coupled to rotate with the support component (<i>e.g.</i>, 4.6) and disposed within the enclosure along a second plane parallel to the first plane and between the first plane and the top cover.

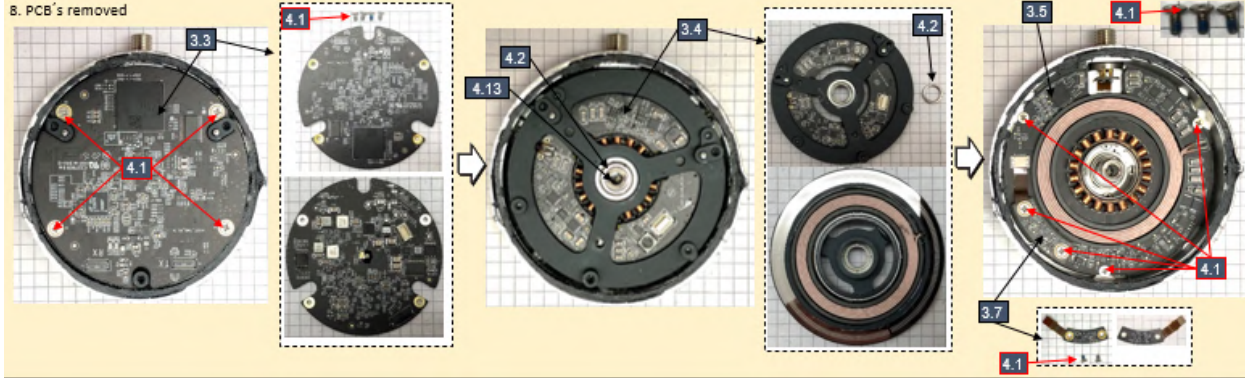
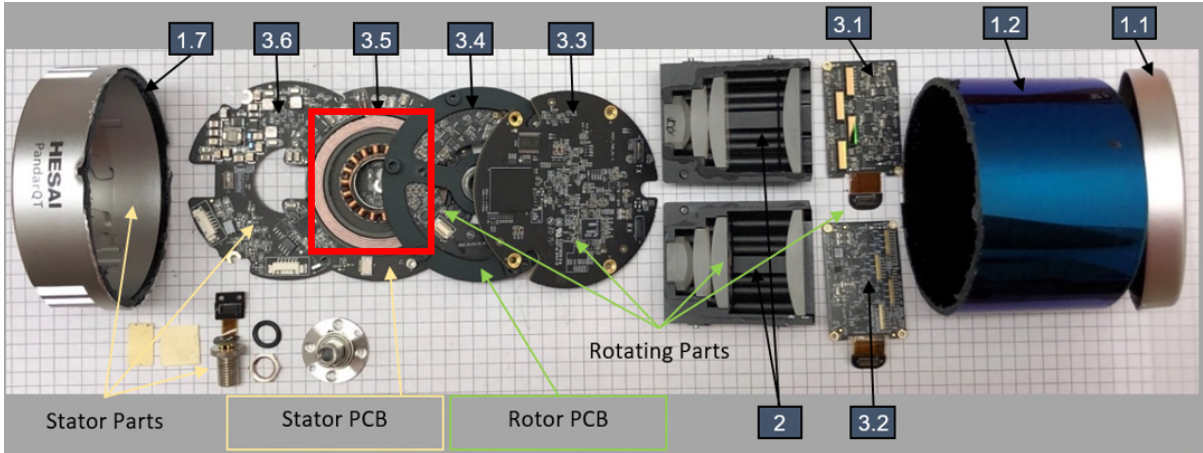
CONFIDENTIAL BUSINESS INFORMATION

Preliminary infringement chart of U.S. 11,287,515 against PandarQT

US 11,287,515	PandarQT
	 PandarQT Teardown Schematic of PCB arrangement  PandarQT Teardown

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Preliminary infringement chart of U.S. 11,287,515 against PandarQT

US 11,287,515	PandarQT
	8. PCB's removed  PandarQT Teardown
[14g] a stator assembly coupled to the stator circuit board and comprising a plurality of stator elements arranged annularly about the axis of rotation, each of the plurality of stator elements including a coil;	PandarQT includes a stator assembly (<i>e.g.</i>, components around center of 3.5) coupled to the stator circuit board (<i>e.g.</i>, the circuitry around the outside of 3.5) and comprising a plurality of stator elements (<i>e.g.</i>, 5.5) arranged annularly about the axis of rotation, each of the plurality of stator elements including a coil.  PandarQT Teardown (emphasis added)

CONFIDENTIAL BUSINESS INFORMATION

Preliminary infringement chart of U.S. 11,287,515 against PandarQT

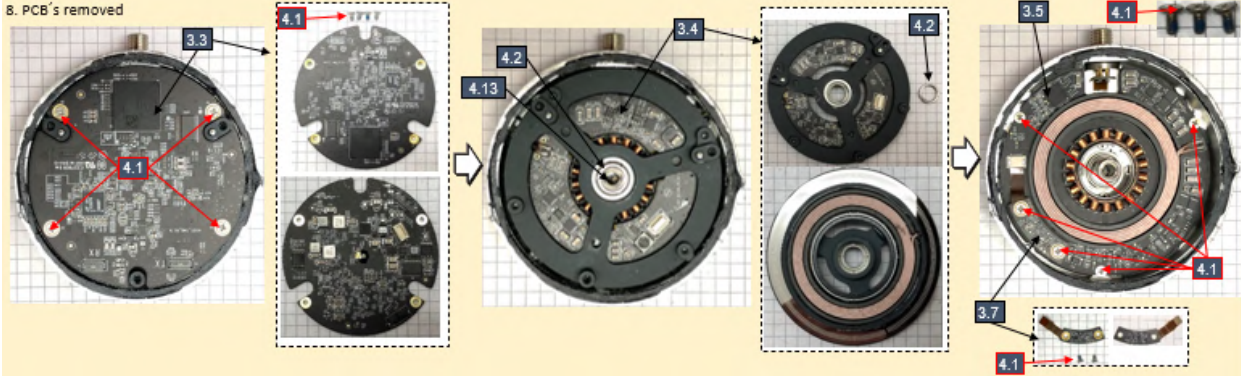
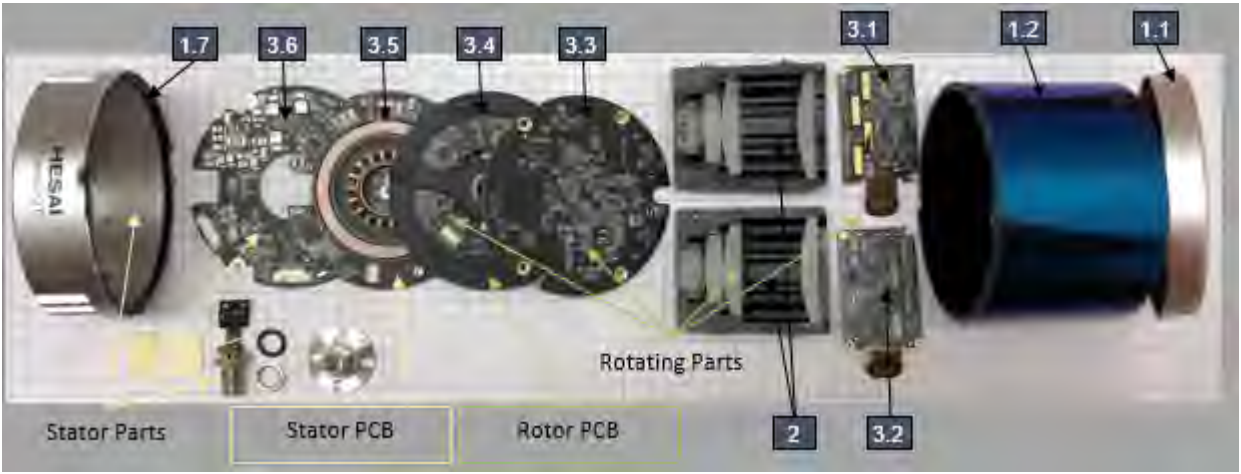
US 11,287,515	PandarQT
	10. Mechanical Parts of Stator PCB PandarQT Teardown PandarQT Teardown
[14h] a rotor assembly coupled to the rotor circuit board, the rotor assembly including an annular arrangement in which a plurality of magnetic poles surround the axis of	PandarQT includes a rotor assembly (<i>e.g.</i>, circled components below) coupled to the rotor circuit board (<i>e.g.</i>, 3.4 and/or 3.3), the rotor assembly including an annular arrangement (<i>e.g.</i>, 4.12) in which a plurality of magnetic poles surround the axis of rotation in an alternating pattern such that each magnetic pole has a polarity opposite a polarity of its adjacent magnetic poles.

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

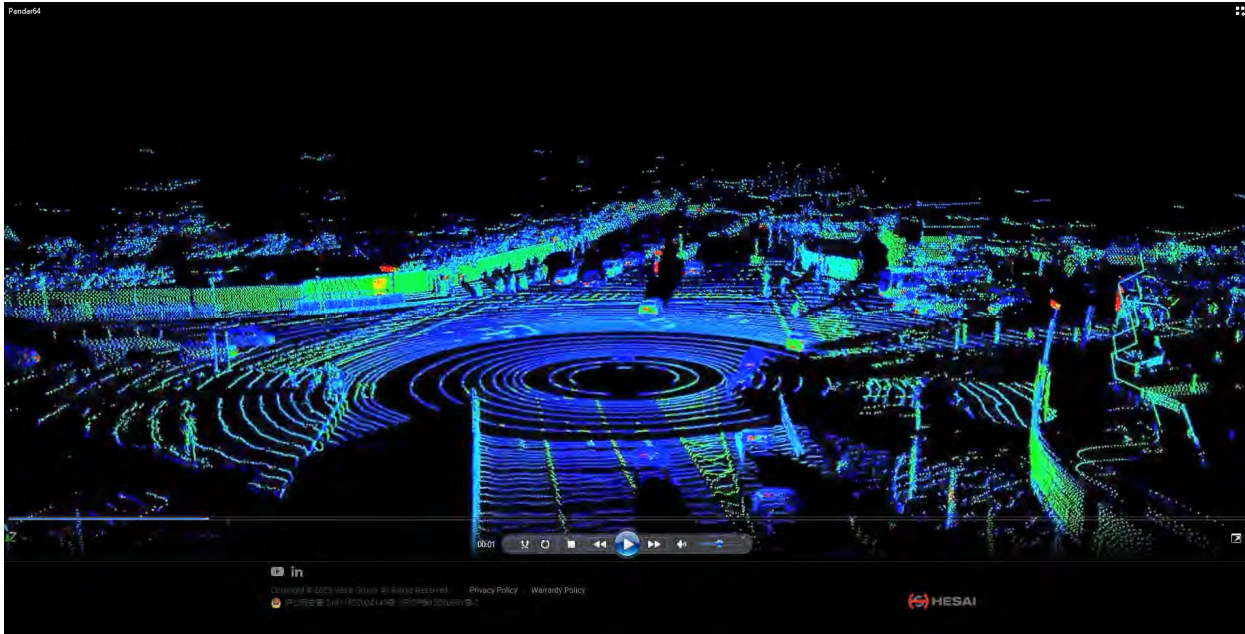
US 11,287,515	PandarQT																												
rotation in an alternating pattern such that each magnetic pole has a polarity opposite a polarity of its adjacent magnetic poles; and	PandarQT Teardown (emphasis added) <table border="1"> <thead> <tr> <th>4</th> <th>Mechanical Parts of Rotor PCB</th> </tr> </thead> <tbody> <tr> <td>4.1</td> <td>18 Screw M2</td> </tr> <tr> <td>4.2</td> <td>1 Lock Nut Rotor Ball-Bearing</td> </tr> <tr> <td>4.3</td> <td>1 Stator Ball-Bearing</td> </tr> <tr> <td>4.4</td> <td>2 Fitting Pin</td> </tr> <tr> <td>4.5</td> <td>1 Ball-Bearing Rotor</td> </tr> <tr> <td>4.6</td> <td>1 Mechanical Rotor</td> </tr> <tr> <td>4.7</td> <td>1 Code Wheel</td> </tr> <tr> <td>4.8</td> <td>1 Ferrite Core Power Transformer Rotor</td> </tr> <tr> <td>4.9</td> <td>1 Winding Power Transformer Rotor</td> </tr> <tr> <td>4.10</td> <td>1 Glue for Ferrite Core and Code Wheel</td> </tr> <tr> <td>4.11</td> <td>1 Ferrite Ring Magnet</td> </tr> <tr> <td>4.12</td> <td>1 Glue Transformer Windings</td> </tr> <tr> <td>4.13</td> <td>1 Motor Axis</td> </tr> </tbody> </table> PandarQT Teardown	4	Mechanical Parts of Rotor PCB	4.1	18 Screw M2	4.2	1 Lock Nut Rotor Ball-Bearing	4.3	1 Stator Ball-Bearing	4.4	2 Fitting Pin	4.5	1 Ball-Bearing Rotor	4.6	1 Mechanical Rotor	4.7	1 Code Wheel	4.8	1 Ferrite Core Power Transformer Rotor	4.9	1 Winding Power Transformer Rotor	4.10	1 Glue for Ferrite Core and Code Wheel	4.11	1 Ferrite Ring Magnet	4.12	1 Glue Transformer Windings	4.13	1 Motor Axis
4	Mechanical Parts of Rotor PCB																												
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CONFIDENTIAL BUSINESS INFORMATION

Preliminary infringement chart of U.S. 11,287,515 against PandarQT

US 11,287,515	PandarQT
	8. PCB's removed  PandarQT Teardown  PandarQT Teardown
[14i] a light ranging device coupled to rotate with the rotor circuit board within the enclosure, the light ranging device comprising a	PandarQT includes a light ranging device (e.g., inside housing 2.1 and 2.4) coupled to rotate with the rotor circuit board (e.g., 3.4 and/or 3.3) within the enclosure, the light ranging device comprising a transmit module comprising a bulk transmitting optic (e.g., lens in housing 2.4) and an illumination source (e.g., vertical-cavity surface-emitting lasers (VCSELs) on PCB 3.2)

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

US 11,287,515	PandarQT
transmit module comprising a bulk transmitting optic and an illumination source operable to transmit pulses of electromagnetic radiation through the bulk transmitting optic and through the window to objects in a surrounding environment, and an receive module comprising a bulk receiver optic and detector circuitry operable to detect reflected portions of the electromagnetic radiation pulses received through the window that are reflected from the objects in the surrounding environment; and	operable to transmit pulses of electromagnetic radiation through the bulk transmitting optic and through the window to objects in a surrounding environment (as shown, <i>e.g.</i>, in the point cloud), and an receive module (<i>e.g.</i>, inside housing 2.1) comprising a bulk receiver optic (<i>e.g.</i>, lens in housing 2.1) and detector circuitry (<i>e.g.</i>, single photon avalanche diodes (SPADs) on PCB 3.1) operable to detect reflected portions of the electromagnetic radiation pulses received through the window that are reflected from the objects in the surrounding environment.  PandarQT 64-Channel Point Cloud Video, available at: https://www.hesaitech.com/product_downloads/pandar64-4/point-cloud-download/

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US 11,287,515	PandarQT
	side-lidar-school-gate  QT128 Point Cloud Video, available at: https://www.hesaitech.com/product_downloads/qt128/point-cloud-download/

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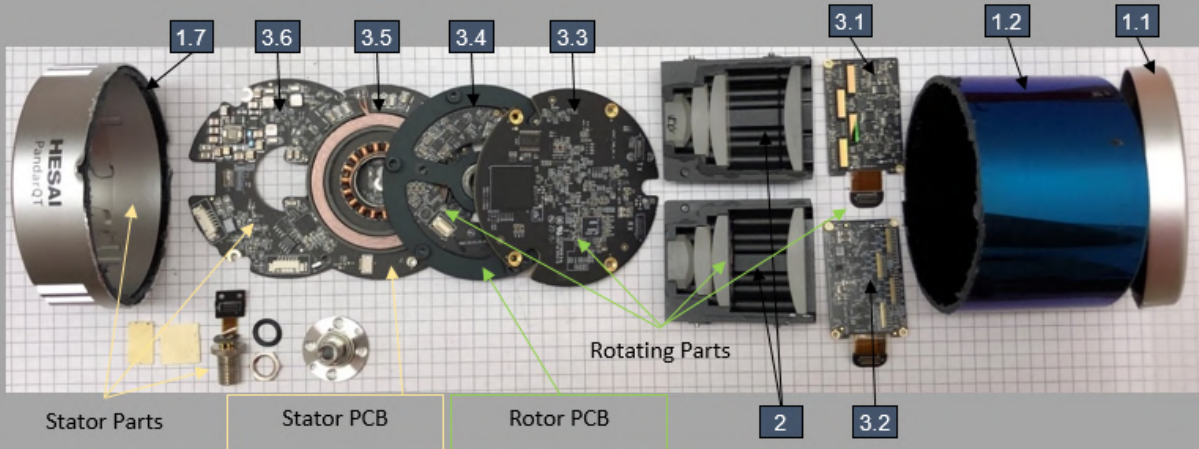
US 11,287,515	PandarQT
	 PandarQT Teardown (emphasis added)

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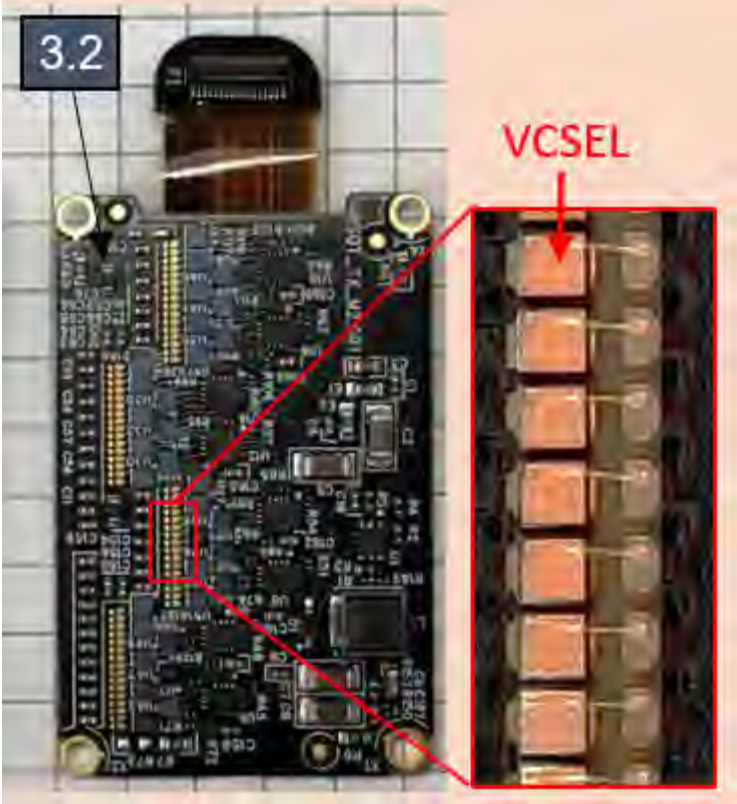
US 11,287,515	PandarQT
	 This image shows a top-down view of a PandarQT sensor assembly. It features a central black housing with two callout boxes: '2.1' pointing to the left side and '2.4' pointing to the right side. Below the housing, two circuit boards are visible, connected by a central component. PandarQT Teardown  This image shows a front view of a PandarQT sensor assembly. It features a black housing with a central opening and a silver base. Two callout boxes are present: '2.1' pointing to the left side of the housing and '2.4' pointing to the right side. The base has a circular port in the center. PandarQT Teardown

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

US 11,287,515	PandarQT
	Assembly Overview Sensor PandarQT (86,6 mm x 80 mm x76,13 mm; 474,29 g)  PandarQT Teardown

CONFIDENTIAL BUSINESS INFORMATION

Preliminary infringement chart of U.S. 11,287,515 against PandarQT

US 11,287,515	PandarQT
	 PandarQT Teardown

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

US 11,287,515	PandarQT
	This manual describes the specifications, installation, and data format of PandarQT. 1.1 Operating Principle Distance Measurement: Time of Flight (ToF) 1) A laser diode emits a beam of ultrashort laser pulses onto the target object. 2) The laser pulses are reflected after hitting the target object. The returning beam is detected by an optical sensor. 3) Distance to the object can be accurately measured by calculating the time between laser emission and receipt. $d = \frac{ct}{2}$ d: distance c: speed of light t: travel time of the laser beam Figure 1.1 Distance Measurement Using Time of Flight PandarQT 64-Channel User Manual (Apr. 2022) at 10

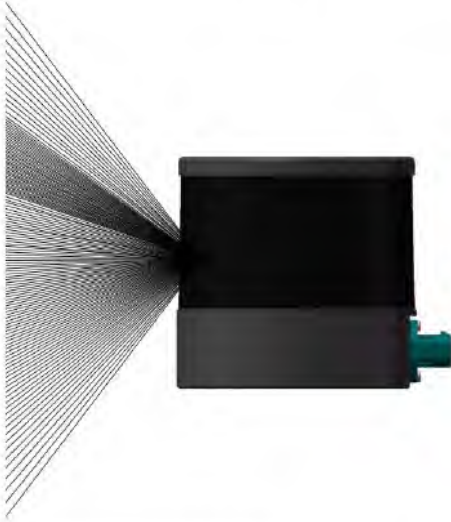
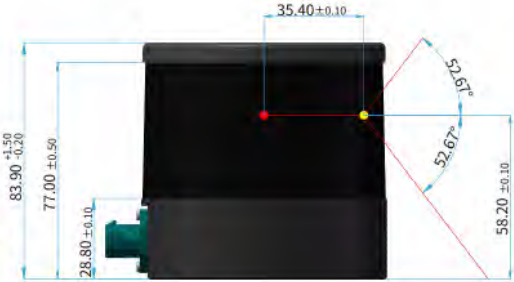
CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

US 11,287,515	PandarQT
	This manual describes the specifications, installation, and data format of QT128C2X. 1.1 Operating Principle Distance Measurement: Time of Flight (ToF) 1) A laser diode emits a beam of ultrashort laser pulses onto the target object. 2) The laser pulses are reflected after hitting the target object. The returning beam is detected by an optical sensor. 3) Distance to the object can be accurately measured by calculating the time between laser emission and receipt. $d = \frac{ct}{2}$ d; distance c; speed of light t; travel time of the laser beam Figure 1.1 Distance Measurement Using Time of Flight QT128C2X User Manual (Aug. 2022) at 10

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

US 11,287,515	PandarQT
	1.3 Channel Distribution The vertical resolution is unevenly distributed across all channels, as illustrated in Figure 1.5 and detailed in Appendix I (Channel Distribution). Figure 1.5 Channel Vertical Distribution Figure 1.6 Laser Firing Position (Unit: mm) PandarQT 64-Channel User Manual (Apr. 2022) at 12

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

US 11,287,515	PandarQT
	1.3 Channel Distribution The vertical resolution is unevenly distributed across all channels, as illustrated in Figure 1.5 and detailed in Appendix I (Channel Distribution). Channel 128 +52.63° Channel 115 +36.08° Channel 78 +18.76° Channel 1 -52.63°  Figure 1.5 Channel Vertical Distribution  Figure 1.6 Laser Firing Position (Unit: mm) QT128C2X User Manual (Aug. 2022) at 12

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

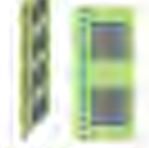
US 11,287,515	PandarQT		
	MECHANICAL/ELECTRICAL/OPERATIONAL		
	Wavelength	885 nm	
	Laser Class	Class 1 Eye Safe	
	Ingress Protection	IP6K7 & IP6K9K	
	Dimensions	Height:	76.0 mm
		Top/Bottom:	Φ76.3/80.2 mm
	Rated Voltage Range	DC 12 to 48 V	
	Power Consumption ③	8 W	
	Operating Temperature	-20°C to 65°C	
	Storage Temperature	-40°C to 85°C	
	Weight	0.47 kg	
PandarQT 64-Channel User Manual (Apr. 2022) at 13			

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

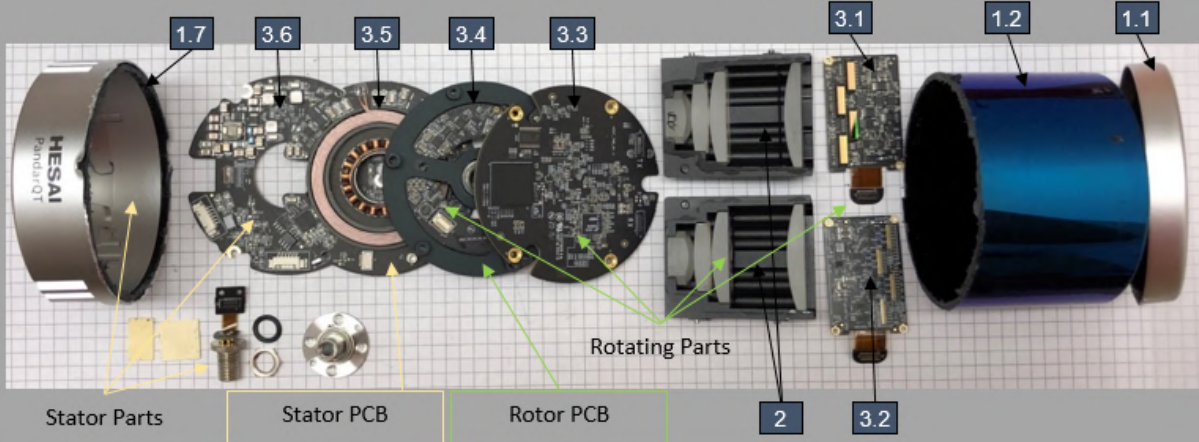
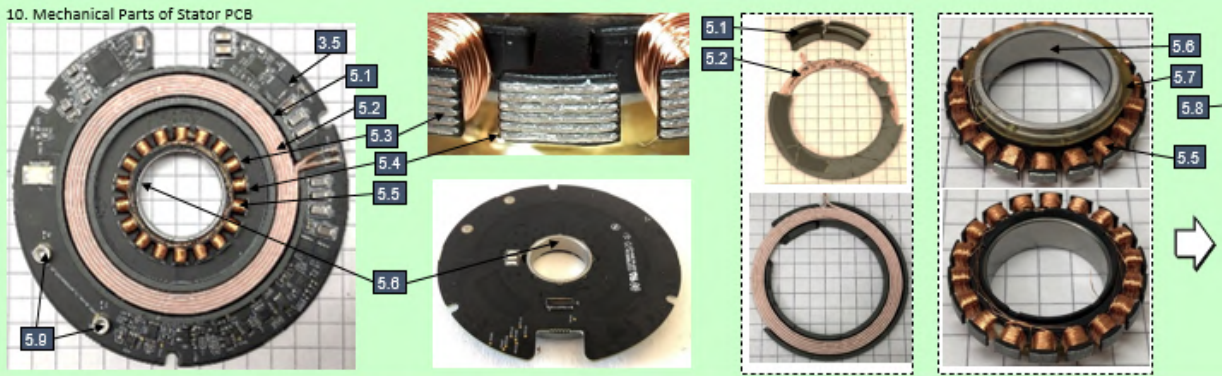
US 11,287,515	PandarQT																			
	MECHANICAL/ELECTRICAL/OPERATIONAL <table> <tr> <td>Wavelength</td><td>940 nm</td></tr> <tr> <td>Laser Class</td><td>Class 1 Eye Safe</td></tr> <tr> <td>Ingress Protection</td><td>IP6K7 & IP6K9K</td></tr> <tr> <td rowspan="2">Dimensions</td><td>Height: 83.9 mm</td></tr> <tr> <td>Top/Bottom: Φ85.9/87.0 mm</td></tr> <tr> <td>Rated Voltage Range</td><td>DC 12 to 48 V</td></tr> <tr> <td>Power Consumption ③</td><td>12 W</td></tr> <tr> <td>Operating Temperature</td><td>-40°C to 85°C</td></tr> <tr> <td>Storage Temperature</td><td>-40°C to 95°C</td></tr> <tr> <td>Weight</td><td>0.7 kg</td></tr> </table> QT128C2X User Manual (Aug. 2022) at 14 “On conjunction with the planarization on the transmitting side and the direction of development of single-photon detectors on the receiving side, the company's PandarQT product line uses a combination of VCSEL light source + single-photon detector, which provides a foundation for the future application of this architecture in long-range radar.” Ex. 32 (“Certified Translation of Hesai 2020 Prospectus”) at 4	Wavelength	940 nm	Laser Class	Class 1 Eye Safe	Ingress Protection	IP6K7 & IP6K9K	Dimensions	Height: 83.9 mm	Top/Bottom: Φ 85.9/87.0 mm	Rated Voltage Range	DC 12 to 48 V	Power Consumption ③	12 W	Operating Temperature	-40°C to 85°C	Storage Temperature	-40°C to 95°C	Weight	0.7 kg
Wavelength	940 nm																			
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CONFIDENTIAL BUSINESS INFORMATION

Preliminary infringement chart of U.S. 11,287,515 against PandarQT

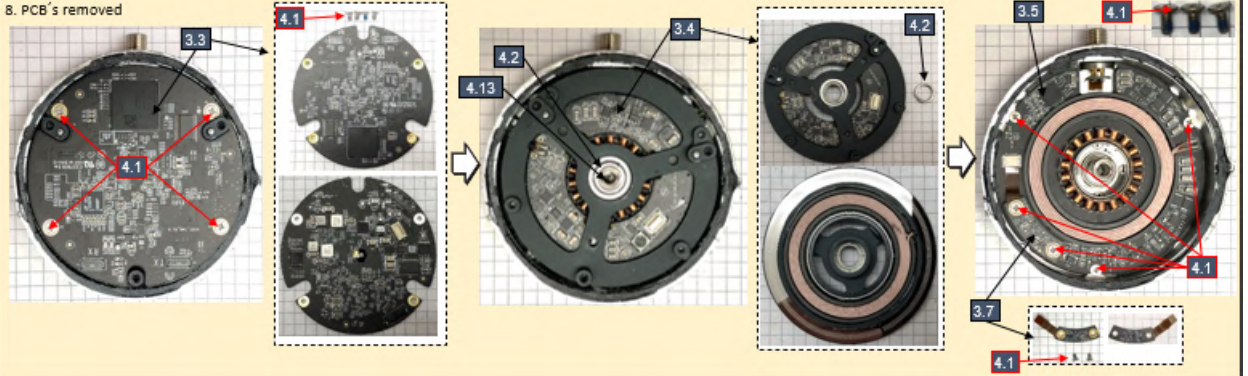
US 11,287,515	PandarQT				
	Scanning Architecture				Surface Array Architecture
					
	Launching Receiving	Launching Receiving	Launching Receiving	Launching Receiving	Launching Receiving
	EEL + multi-channel drive of component force APD + multi-channel TIA of component force	EEL + multi-channel drive IC APD + Front end IC of multi-channel simulation High-precision ADC chips	VCSEL + multi-channel drive IC SiPM + Front end IC of multi-channel simulation High-precision TDC chips	VCSEL + multi-channel drive IC SPAD array + linear array SoC	VCSEL surface array + surface array drive IC SPAD array + surface array SoC
	Discrete device	Chip V1.0	Chip V1.5	Chip V2.0	Chip V3.0
Figure: Chip development path Certified Translation of Hesai 2020 Prospectus at 6					
[14j] a stator driver circuit disposed within the enclosure and configured to provide a drive signal to the plurality of stator elements, thereby imparting an electromagnetic force on rotor assembly to drive a rotation of the rotor circuit board and the light ranging device about the shaft.	PandarQT includes a stator driver circuit (<i>e.g.</i> , 3.6) disposed within the enclosure and configured to provide a drive signal to the plurality of stator elements, thereby imparting an electromagnetic force on rotor assembly to drive a rotation of the rotor circuit board and the light ranging device about the shaft.				

CONFIDENTIAL BUSINESS INFORMATION**Preliminary infringement chart of U.S. 11,287,515 against PandarQT**

US 11,287,515	PandarQT
	Assembly Overview Sensor PandarQT (86,6 mm x 80 mm x76,13 mm; 474,29 g)  PandarQT Teardown  PandarQT Teardown

CONFIDENTIAL BUSINESS INFORMATION

Preliminary infringement chart of U.S. 11,287,515 against PandarQT

US 11,287,515	PandarQT
	8. PCB's removed  PandarQT Teardown