

EXHIBIT 10

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U.S. Patent No. 11,376,415 Claim	Abbott's '415 Accused Products ¹
1. A system for assisting the blood circulation of a heart in a body, comprising:	Abbott has made, used, sold, offered for sale, and/or imported into the United States and is currently making, using, selling, offering for sale and/or importing into the United States products that infringe one or more claims of the '415 patent (the "'415 Accused Products"). Abbott's '415 Accused Products include, but are not necessarily limited to, Abbott's HeartMate 3 Left Ventricular Assist System (LVAS) system ("HeartMate 3")², and any other Abbott products, either alone or in combination, that operate in a reasonably similar manner. For example, and to the extent that Abbott argues that the preamble is a limitation, HeartMate 3 is a system for assisting the blood circulation of a heart in a body, as recited by claim 1. As shown in the exemplary images below from Abbott's documentation for the HeartMate 3 products, the HeartMate 3 is configured such that when implanted and assembled, it "assumes some or all of the workload of the left ventricle" to assist the heart in circulating blood in the patient's body. Overview The HeartMate 3™ Left Ventricular Assist System (LVAS) is a set of equipment and materials that together comprise a medical device designed to provide therapeutic benefit to those affected with advanced heart failure. In service, the LVAS assumes some or all of the workload of the left ventricle, thereby restoring the patient's systemic perfusion while palliating the underlying pathology. The LVAS features a Left Ventricular Assist Device (LVAD), a blood pump intended for long-term implantation in such patients, an extracorporeal Controller, plus all of the features, controls, attachments, interfaces, power sources, supporting equipment, labeling, and tools required to achieve the desired therapeutic benefit. The HeartMate 3 Left Ventricular Assist System is intended for use inside or outside the hospital, or for transportation of LVAD patients via ground ambulance, airplane, or helicopter.

¹ These allegations are exemplary. Discovery from Abbott has not yet begun, and may uncover additional Abbott products that infringe the '415 patent literally or under the doctrine of equivalents. The Court has also not yet construed any terms from any claims of the '415 patent. Thus, Plaintiff reserves the right to supplement these allegations as the case progresses through discovery and the claim construction process.

² The claim chart herein cites to exemplary evidence regarding Abbott's HeartMate 3 products, as products that infringe the '415 patent.

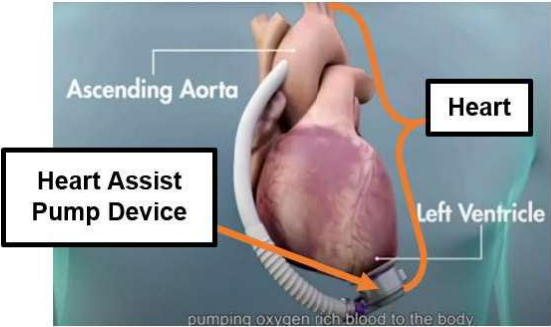
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	 Exemplary Sources³: “HeartMate 3™ Left Ventricular Assist System Instructions for Use” at pages marked “1-3” – available for download at https://manuals.sjm.com/Search-Form?re=North-America&cc=US&ln=EN&ct=professional&qry=heartmate&ipp=10⁴ via https://manuals.sjm.com/~media/manuals/product-manual-pdfs/5/7/571a1818-2da2-4c1a-b454-f6f5a3bc39b6.pdf. <i>See also</i> the evidence and analysis for the claim elements discussed below.

³ The sources identified herein are merely exemplary.

⁴ All hyperlinks cited herein were last accessed 20 November, 2023.

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a heart assist pump device deliverable to the heart and comprising:	Abbott's '415 Accused Products include a heart assist pump device deliverable to the heart. For example, the HeartMate 3 products include a Left Ventricular Assist Device (LVAD), a heart assist pump device configured to be delivered to a patient's heart, as shown in the exemplary annotated⁵ image below:  Exemplary Source: Video titled “HeartMate 3 LVAD Patient Education Program – (2) System Overview,” available at https://www.youtube.com/watch?v=hmmplKzmKe0. <i>See also</i> the evidence and analysis for the Preamble above and the other claim elements discussed herein.
an inflow tube defining a blood inflow path and having a suction end insertable into a ventricle of the heart;	Abbott's '415 Accused Products include an inflow tube defining a blood inflow path and having a suction end insertable into a ventricle of the heart. For example, as shown in the annotated image below, HeartMate 3's LVAD heart assist pump device comprises an inflow tube, which Abbott calls an inflow cannula, which defines the blood inflow path from from the left ventricle of a patient's heart. Also, the inflow cannula includes a suction end which is configured to be inserted into a left ventricle of a patient's heart.

⁵ All annotations in black text boxes herein have been added by Plaintiff, to supplement the existing annotations (if any).

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	The diagram illustrates the internal components and flow of a ventricular assist device. A red arrow labeled 'Flow from left ventricle' enters the 'Suction End' of the 'Inflow Tube'. The tube has a 'Textured surface' and leads to a 'Rotor' housed within a 'Full MagLev' (magnetic levitation) chamber. This chamber is driven by an 'Electromagnetic motor'. The rotor's position is defined by '~1.0mm top and bottom' clearance and '~0.5mm sides'. The flow exits the device as 'Outflow to aorta'. Exemplary Source: Figure 1 from “HeartMate 3 in Lowest INTERMACS Profile Cohort: The Swiss Experience,” available at https://www.researchgate.net/publication/317276467_HeartMate_3_in_Lowest_INTERMACS_Profile_Cohort_The_Swiss_Experience. <i>See also</i> the evidence and analysis for the Preamble above and the other claim elements discussed herein.

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a magnetically driven rotor axially aligned with the inflow tube and being spaced apart from the suction end when the suction end of the inflow tube is inserted into the ventricle, the magnetically driven rotor being rotatable within a surrounding rotor housing to act upon blood flowing from the inflow tube toward the rotor,	Abbott's '415 Accused Products include a heart assist pump device comprising a magnetically driven rotor axially aligned with the inflow tube and being spaced apart from the suction end when the suction end of the inflow tube is inserted into the ventricle, the magnetically driven rotor being rotatable within a surrounding rotor housing to act upon blood flowing from the inflow tube toward the rotor. For example, as shown in the annotated images below, HeartMate 3's LVAD heart assist pump device comprises a magnetically driven rotor, which has a central axis. This axis is configured to be aligned with an axis of the inflow tube, which Abbott calls an inflow cannula. The magnetically driven rotor is configured to be spaced apart from the suction end of the inflow cannula when it is inserted into the ventricle, and is shown in the annotated images to be near the opposite end of the heart assist pump device from the suction end. Further, magnetically driven rotor is rotatable within a surrounding housing within the HeartMate 3 LVAD heart assist pump device, to act upon blood flowing from the inflow cannula toward the rotor.

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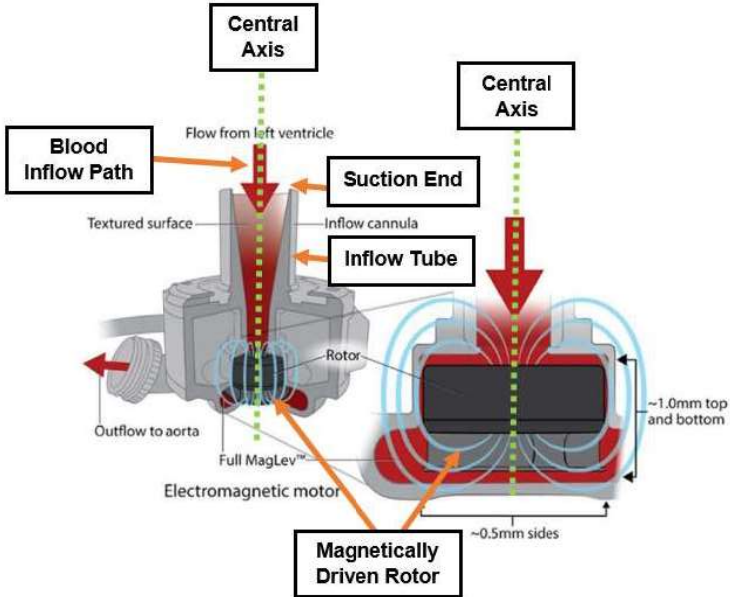
U.S. Patent No. 11,376,415 Claim	Abbott's '415 Accused Products ¹
	 The diagram illustrates a blood pump system. On the left, a cross-sectional view shows a pump housing with a rotor inside. A red arrow labeled 'Flow from left ventricle' points into the pump through an 'Inflow cannula' and 'Inflow Tube'. The 'Blood Inflow Path' is indicated by an orange arrow. The rotor is labeled 'Rotor' and is surrounded by a 'Full MagLev™' system. An 'Electromagnetic motor' is shown at the bottom. The 'Suction End' is at the top. The 'Central Axis' is shown as a vertical dashed line. The 'Outflow to aorta' is indicated by a red arrow on the left. Dimensions are given: '~1.0mm top and bottom' and '~0.5mm sides' for the rotor area. A 'Textured surface' is also labeled.

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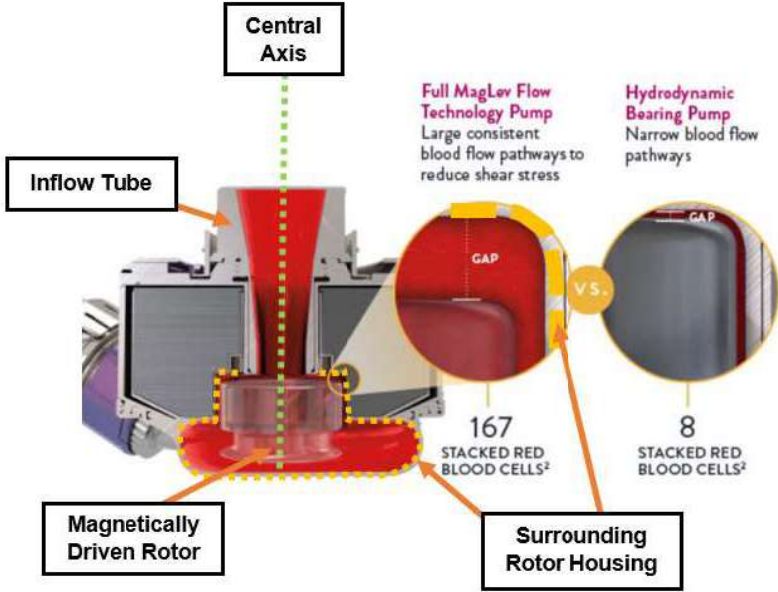
U.S. Patent No. 11,376,415 Claim	Abbott's '415 Accused Products ¹
	 Exemplary Sources: Figure 1 from “HeartMate 3 in Lowest INTERMACS Profile Cohort: The Swiss Experience,” available at https://www.researchgate.net/publication/317276467_HeartMate_3_in_Lowest_INTERMACS_Profile_Cohort_The_Swiss_Experience; HeartMate 3 Website at https://www.cardiovascular.abbott/us/en/hcp/products/heart-failure/left-ventricular-assist-devices/heartmate-3/about.html. <i>See also</i> the evidence and analysis for the Preamble above and the other claim elements discussed herein.

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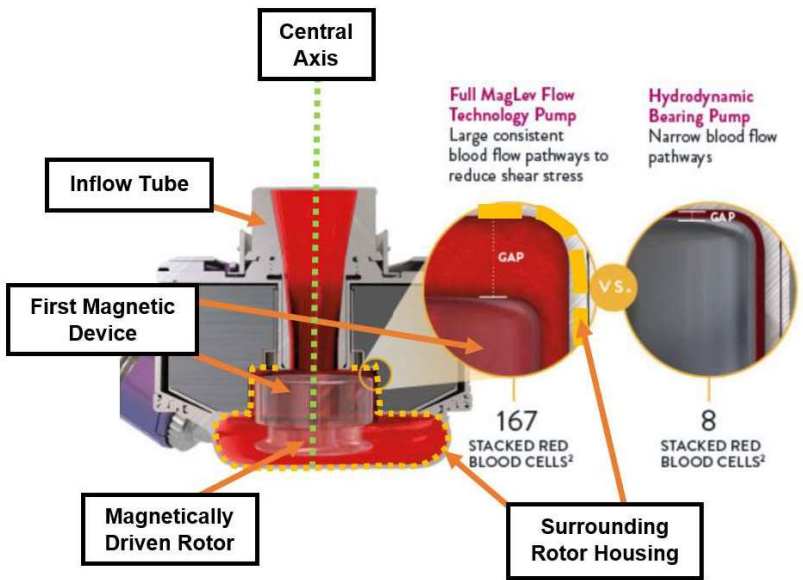
U.S. Patent No. 11,376,415 Claim	Abbott's '415 Accused Products ¹
the magnetically driven rotor being rotatable about a central axis and being rigidly coupled to and axially adjacent to a first magnetic device that is located within the surrounding rotor housing;	The magnetically driven rotor of Abbott's '415 Accused Products is rotatable about a central axis and rigidly coupled to and axially adjacent to a first magnetic device that is located within the surrounding rotor housing. For example, the magnetically driven rotor of the HeartMate 3 heart assist pump is rotatable a central axis, and is rigidly coupled to a first magnetic device within the surrounding rotor housing, as shown in the exemplary annotated image below.  Exemplary Source: HeartMate 3 Website at https://www.cardiovascular.abbott/us/en/hcp/products/heart-failure/left-ventricular-assist-devices/heartmate-3/about.html. <i>See also</i> the evidence and analysis for the Preamble above and the other claim elements discussed herein.

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a second magnetic device axially aligned with the inflow tube and positioned to magnetically drive rotation of the magnetically driven rotor via a magneto coupling with the first magnetic device while being spaced apart and sealed from both the magnetically driven rotor and the first magnetic device by at least one sealing wall, the second magnetic device being positioned axially spaced apart from the magnetically driven rotor;	Abbott's '415 Accused Products include a second magnetic device axially aligned with the inflow tube and positioned to magnetically drive rotation of the magnetically driven rotor via a magneto coupling with the first magnetic device while being spaced apart and sealed from both the magnetically driven rotor and the first magnetic device by at least one sealing wall, the second magnetic device being positioned axially spaced apart from the magnetically driven rotor. For example, the HeartMate 3 heart assist pump device includes a second magnetic device which Abbot calls a Motor, Stator, and/or MagLev Flow technology. This second magnetic device is configured to be aligned with an axis of the inflow tube, which itself is axially aligned with the central axis of the magnetically driven rotor as discussed above. The second magnetic device is positioned to magnetically drive the magnetically driven rotor to rotate via a magneto coupling with the first magnetic device. Further, the second magnetic device is configured to be spaced axially apart from the magnetically driven rotor, as well as spaced apart and sealed from the magnetically driven rotor and first magnetic device by at least one sealing wall, such as a sealing wall of the surrounding rotor housing, as shown in the exemplary annotated images below.

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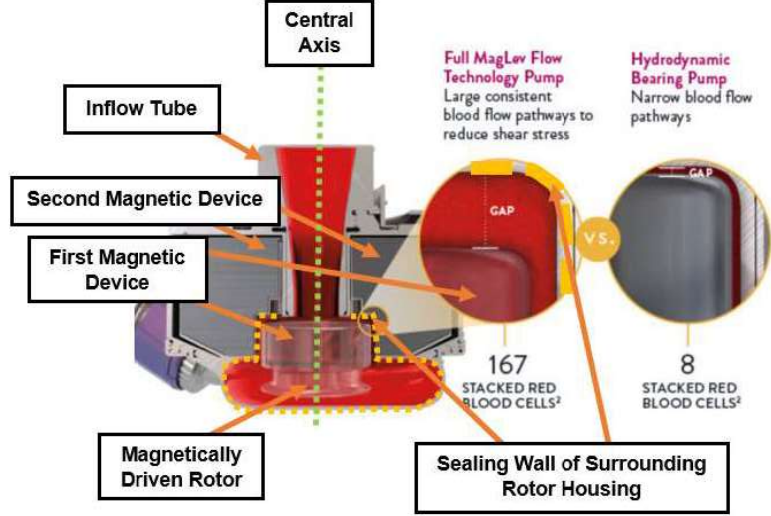
U.S. Patent No. 11,376,415 Claim	Abbott's '415 Accused Products ¹
	 Central Axis Inflow Tube Second Magnetic Device First Magnetic Device Magnetically Driven Rotor Sealing Wall of Surrounding Rotor Housing Full MagLev Flow Technology Pump Large consistent blood flow pathways to reduce shear stress Hydrodynamic Bearing Pump Narrow blood flow pathways GAP V.S. 167 STACKED RED BLOOD CELLS² 8 STACKED RED BLOOD CELLS² Exemplary Source: HeartMate 3 Website at https://www.cardiovascular.abbott/us/en/hcp/products/heart-failure/left-ventricular-assist-devices/heartmate-3/about.html.

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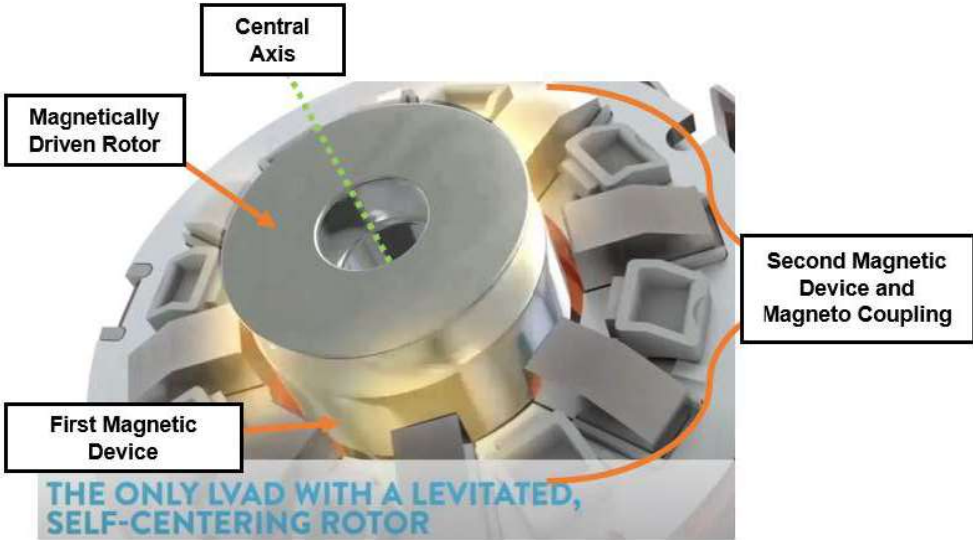
U.S. Patent No. 11,376,415 Claim	Abbott's '415 Accused Products ¹
	 Exemplary Source: Video titled “HeartMate 3 LVAD Peer-to-Peer Video Presentation” at https://youtu.be/_C-K-DCINbl. <i>See also</i> the evidence and analysis for the Preamble above and the other claim elements discussed herein.
a blood outflow port positioned radially adjacent the magnetically driven rotor such that blood driven by the magnetically driven rotor is configured to exit the surrounding rotor housing in a direction substantially perpendicular from the blood inflow path and the central axis of the magnetically driven rotor,	Abbott's '415 Accused Products include a blood outflow port positioned radially adjacent the magnetically driven rotor such that blood driven by the magnetically driven rotor is configured to exit the surrounding rotor housing in a direction substantially perpendicular from the blood inflow path and the central axis of the magnetically driven rotor. For example, the HeartMate 3 heart assist pump device includes a port for blood outflow to the aorta, as shown in the annotated image below. This port is radially adjacent to the magnetically driven rotor, such that blood driven by the rotor is configured to exit the housing through the port in a direction substantially perpendicular

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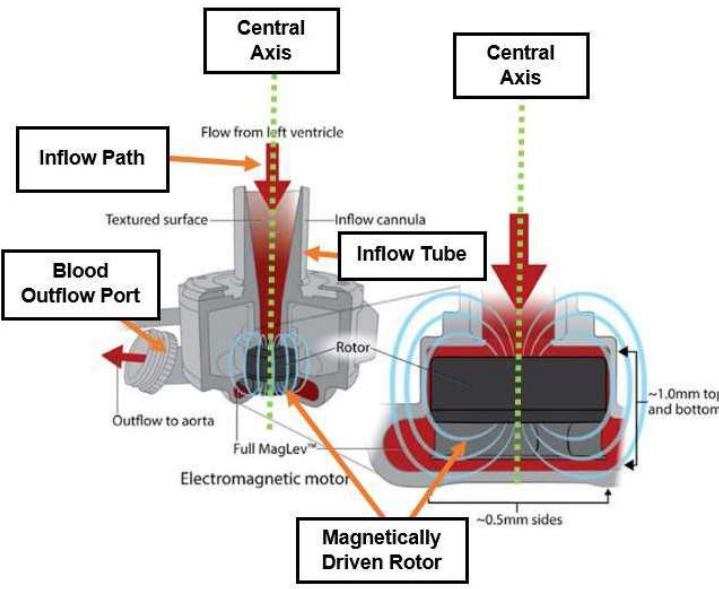
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	from the inflow path for the inflow cannula. This outflow direction is also substantially perpendicular to the central axis of the magnetically driven rotor, as its central axis is substantially parallel to the inflow path for the inflow cannula.  The diagram illustrates the internal components of the HeartMate 3 ventricular assist device. It shows a cross-section of the device with the following labeled parts: 'Central Axis' (indicated by a dashed green line), 'Inflow Path' (indicated by an orange arrow), 'Flow from left ventricle' (indicated by a red arrow), 'Textured surface' (on the inflow cannula), 'Inflow cannula', 'Inflow Tube', 'Blood Outflow Port' (indicated by an orange arrow), 'Outflow to aorta' (indicated by a red arrow), 'Rotor' (a central rotating component), 'Full MagLev™' (magnetic levitation system), 'Electromagnetic motor' (surrounding the rotor), and 'Magnetically Driven Rotor' (a box highlighting the rotor assembly). Dimensions are noted as '~1.0mm top and bottom' and '~0.5mm sides' for the rotor area. Exemplary Source: Figure 1 from “HeartMate 3 in Lowest INTERMACS Profile Cohort: The Swiss Experience,” available at https://www.researchgate.net/publication/317276467_HeartMate_3_in_Lowest_INTERMACS_Profile_Cohort_The_Swiss_Experience. <i>See also</i> the evidence and analysis for the Preamble above and for the other claim elements discussed herein.

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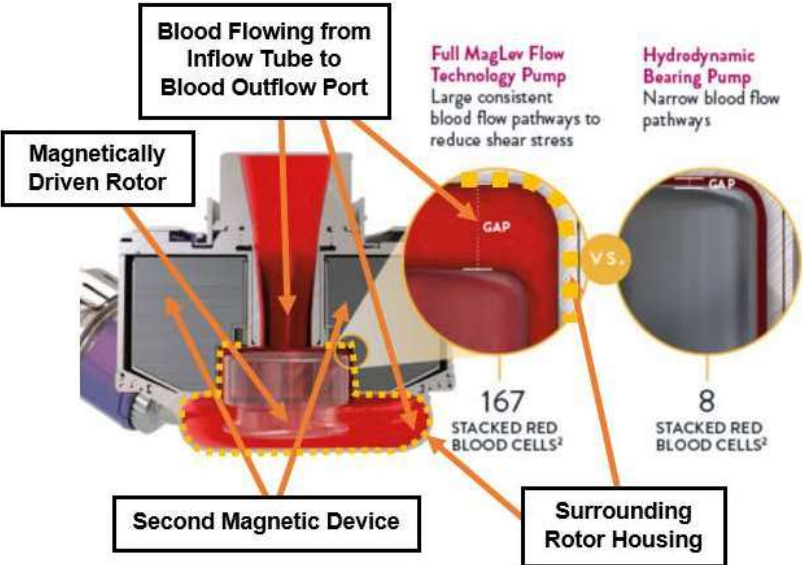
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wherein the magneto coupling orients the magnetically driven rotor so that, in response to rotation of the magnetically driven rotor, the magnetically driven rotor remains adjacent to and spaced apart from the surrounding rotor housing by the blood flowing from the inflow tube and to the blood outflow port; and	The magneto coupling of Abbott's '415 Accused Products orients the magnetically driven rotor so that, in response to rotation of the magnetically driven rotor, the magnetically driven rotor remains adjacent to and spaced apart from the surrounding rotor housing by the blood flowing from the inflow tube and to the blood outflow port. For example, the second magnetic device of the HeartMate 3 (which Abbott calls a Motor, Stator, and/or MagLev Flow Technology) is configured to orient the magnetically driven rotor in its housing via the magneto coupling between the second magnetic device and the first magnetic device. And in response to rotation of the magnetically driven rotor, the second magnetic device orients the rotor via the magneto coupling so that it remains adjacent to and spaced apart from the surrounding rotor housing by the blood flowing from the inflow cannula to the outflow port that leads to the aorta. 

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	Exemplary Sources: HeartMate 3 Website at https://www.cardiovascular.abbott/us/en/hcp/products/heart-failure/left-ventricular-assist-devices/heartmate-3/about.html; <i>see also</i> video titled “Abbott’s HeartMate 3 LVAD,” available at https://www.youtube.com/watch?app=desktop&v=IbHN8e_OGJw; video titled “HeartMate 3 LVAD Peer-to-Peer Video Presentation” at https://youtu.be/_C-K-DCINbI. <i>See also</i> the evidence and analysis for the Preamble above and the other claim elements discussed herein.
an external control unit configured to regulate operation of the second magnetic device, the external control unit being positionable exterior to the body while the inflow tube of the heart assist pump device is in the heart, wherein the external control unit is connectable to the heart assist pump device for controlling the second magnetic device to thereby magnetically drive the rotation of the magnetically driven rotor via the magneto coupling with the first magnetic device.	Abbott’s ‘415 Accused Products include an external control unit configured to regulate operation of the second magnetic device, the external control unit being positionable exterior to the body while the inflow tube of the heart assist pump device is in the heart, wherein the external control unit is connectable to the heart assist pump device for controlling the second magnetic device to thereby magnetically drive the rotation of the magnetically driven rotor via the magneto coupling with the first magnetic device For example, Abbott’s HeartMate 3 products include an external control unit, which Abbott calls the system controller. This external control unit is configured to be positioned exterior to the patient’s body and connected to the heart assist pump device which Abbott calls the HeartMate 3 LVAD, when the inflow tube of the heart assist pump device is in the heart. The external control unit is also configured to regulate the operation of the second magnetic device, which Abbott calls the Motor, Stator, or MagLev Flow technology, to magnetically drive the rotation of the magnetically driven rotor as discussed above.

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	One end of the pump cable is connected to the pump. Heart Assist Pump Device Pump Cable External Control Unit Modular Cable Exemplary Source: Video titled “HeartMate 3 LVAD Patient Education Program – (2) System Overview,” available at https://www.youtube.com/watch?v=hmmpIKzmKe0; see also “HeartMate 3™ Left Ventricular Assist System Instructions for Use” at pages marked “1-3” and “1-10” – available for download at https://manuals.sjm.com/Search-Form?re=North-America&cc=US&ln=EN&ct=professional&qry=heartmate&ipp=10 via https://manuals.sjm.com/~media/manuals/product-manual-pdfs/5/7/571a1818-2da2-4c1a-b454-f6f5a3bc39b6.pdf. <i>See also</i> the evidence and analysis for the Preamble above and the other claim elements discussed herein.