Pursuant to P.R. 3-1(c) and the Joint Stipulation Regarding Amending Infringement and Invalidity Contention (-356 case, Dkt. 138; -357 case, Dkt. 137), Plaintiff provides the chart below identifying specifically where each element of each asserted claim of the '172 Patent is found within Defendant's consumer and/or medical air mattress systems that utilize the Gen 3 Arco, Gen 3 Koge, and Gen X air controllers. Specifically, Plaintiff provides the following supplementation, which includes prior disclosures and supplementations provided to Defendants on September 7, November 16, and November 26, 2018; (2) adds to and/or clarifies contentions, where appropriate; and (3) adds variable names, written descriptions/summaries of Plaintiff's infringement position in light of the identified variables, and narrowed line number ranges where able/appropriate. These disclosures incorporate by reference the Representative Product Chart, served herewith. Further, these disclosures are made in light of foreseeable claim construction positions, are not to be construed as an acceptance or endorsement of any particular construction, and may be amended pursuant to P.R. 3-6(a)(1). Plaintiff reserves the right to amend this chart after Defendant meaningfully responds to discovery requests by making a fulsome document production, including by producing documents that disclose all of Defendant's products and by providing all of Defendants' products for inspection. Plaintiff further reserves the right to amend this chart after Defendant allows for a sufficient inspection of all relevant Source Code, pursuant to stipulations between the parties.

CLAIM ELEMENT

INFRINGEMENT CONTENTIONS

Claim 2

[2.P] An improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air, a pump fluidly coupled to the at least one air bladder for providing compressed air thereto, and a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle, the improved valve enclosure assembly being fluidly coupled intermediate the pump and the at least one air bladder for controlling the inflation of the at least one air bladder, comprising:

The preamble of claim 2 is limiting and under the plain and ordinary meaning of these claim terms in light of the specification, each claim limitation is met by ANM's Accused Products. Specifically, the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air, a pump fluidly coupled to the at least one air bladder for providing compressed air thereto, and a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle, the improved valve enclosure assembly being fluidly coupled intermediate the pump and the at least one air bladder for controlling the inflation of the at least one air bladder.

The Accused Products having a Gen 3 Arco air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Arco) The Accused Products having a Gen X air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure of Valve Enclosure Assembly (Photograph of Gen X) The Accused Products having a Gen 3 Koge air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:

CLAIM ELEMENT

INFRINGEMENT CONTENTIONS



(Photograph of Gen 3 Koge)

The valve enclosure assemblies of the Gen 3 Arco, Gen X, and Gen 3 Koge are used with an air inflatable mattress having at least one air bladder inflated by compressed air. Non-limiting examples of said use is shown in the photographs below.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

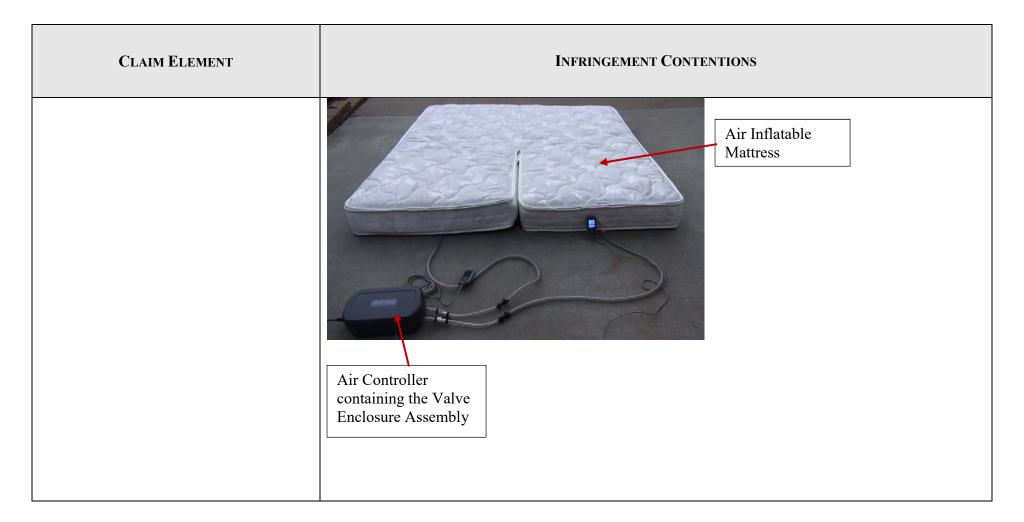
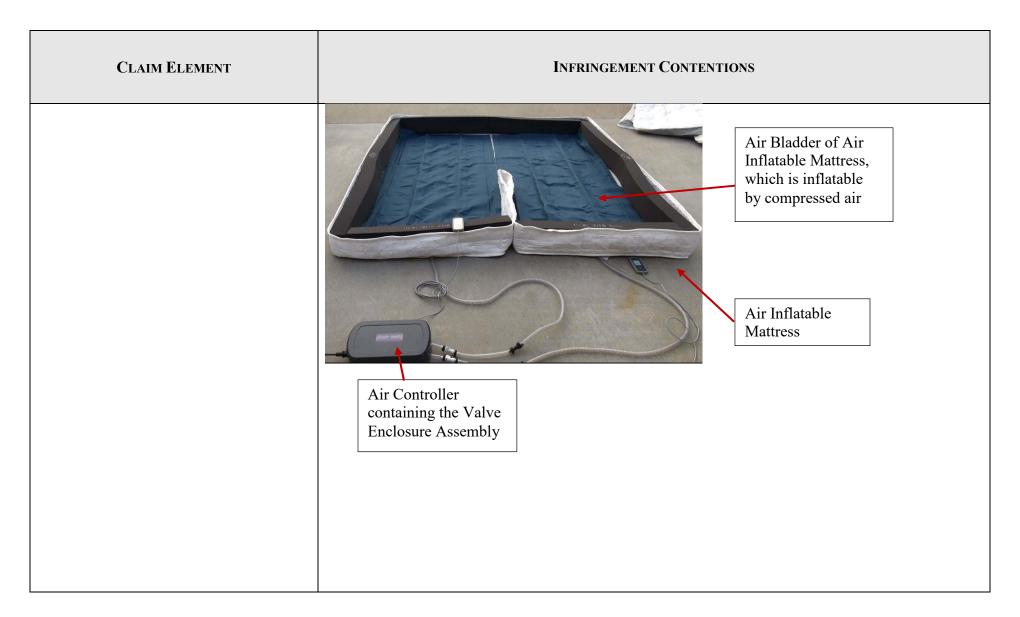


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Air Bladder of Air Inflatable Mattress, inflated by compressed air Air Bladder of Air Inflatable Mattress, deflated Air Bladder of Air Inflatable Mattress, which is inflatable by compressed air

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Air Inflatable Bladders of Air Mattress Inflatable Mattress. which are inflatable by compressed air 31 🔆 🎯 🗒 Air Controller containing the Valve **Enclosure Assembly** (Photograph of medical air mattress system) In the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers, the pump is fluidly coupled to the at least one air bladder for providing compressed air thereto. In the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers, the improved valve enclosure assembly is fluidly coupled intermediate the pump and the at least one air bladder for controlling the inflation of the at least one air bladder. As shown in the photographs below, the pump is fluidly coupled to the enclosure of the valve enclosure assembly via tubing. The enclosure of the valve enclosure assembly is then similarly fluidly coupled to the at least one air bladder with tubing. The pump provides compressed air to the at least one air bladder via the tubing between the pump and the enclosure of the valve enclosure assembly and the tubing between the valve enclosure assembly and the air bladder.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Pump Tubing Fluidly Coupling the Pump to the Valve Enclosure Assembly Enclosure Assembly Tubing Fluidly Coupling the Pump to the Valve Enclosure of Valve Enclosure Assembly Tubing Fluidly Coupling the Enclosure of Valve Enclosure Assembly to an Air Bladder (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	Pum Valv	Pump ing Fluidly Coupling the property to the Enclosure of the Enclosure Assembly Enclosure of Valve Enclosure Assembly aidly Couples the closure of Valve Closure Assembly to Air Bladder

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Gen 3 Koge: Tubing Fluidly Coupling the Pump to the Enclosure of Valve Enclosure Assembly Pump Enclosure of Valve Enclosure of Valve Enclosure Assembly Coupling the Enclosure of Valve Enclosure Assembly to an Air Bladder (Photograph of Gen 3 Koge)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	As shown in the example of a Gen 3 air controller being used with a tubes that fluidly couple to the valve enclosure assembly fluidly coupled inflatable air matress. Because the pump is fluidly coupled to the air using the compressed air from the pump.	ple to the air bladders of the
		Air Bladders of Air Inflatable Mattress, which are inflated using compressed air
		Tubing Fluidly Coupling the Valve Enclosure Assembly to an Air Bladder
	Air Controller containing the Valve Enclosure Assembly	
	In the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers, a process improved valve enclosure assembly during an inflate/deflate cycle:	sor provides commands to the

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Arco: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Arco)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen X: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen X)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Koge: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Koge) Versions 1.8, 1.97, and 2.0 of ANM's source code further demonstrate that the Gen 3 Accused Products include a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

CLAIM ELEMENT	Infringement Contentions
	This limitation may further implicate other electronics, software, firmware, and/or source code of the
	Accused Products. Additional Source Code for the Accused Products may further show how this claim limitation is met. To resolve a dispute regarding Plaintiff's Notice of Inspection for Source Code, the parties have agreed that Plaintiff shall be allowed to inspect remaining Source Code for the Accused Products on mutually agreeable date(s), after which Plaintiff shall supplement its infringement contentions, pursuant to an agreed-upon timeline and without opposition, using the

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	information learned during the inspection.
	Even under Defendants' construction from the ITC proceeding, where a "valve enclosure assembly" means "an enclosure and a rear cover defining an internal, pressurized air chamber enclosing a valve," ANM's Gen 3 or Gen X air controllers meet this claim limitation.
	As seen in the photographs below, the enclosure of the Gen 3 Arco's valve enclosure assembly is comprised of an enclosure and a rear cover.
	Rear Cover of the Valve Enclosure Assembly Internal air chamber Enclosure of the Valve Enclosure Assembly
	Enclosure Enclosure with Rear Cover Removed
	(Photograph of the Gen 3 Arco)

CLAIM ELEMENT	Infringement Contentions
	Furthermore, as seen in the photograph below showing a side perspective view of the Gen 3 Arco's enclosure, the Gen 3 Arco the internal chamber is shown enclosing a valve.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Perspective view of the internal chamber enclosing a valve (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS As seen in the photographs below, the enclosure of the Gen X's valve enclosure assembly is comprised of an enclosure and a rear cover. Rear Cover of the Valve **Enclosure Assembly** Internal air chamber Enclosure of the Valve Enclosure Assembly (Photograph of the Gen 3 Arco) Furthermore, as seen in the photograph below showing a side perspective view of the Gen 3 Arco's enclosure, the Gen 3 Arco the internal chamber is shown enclosing a valve.

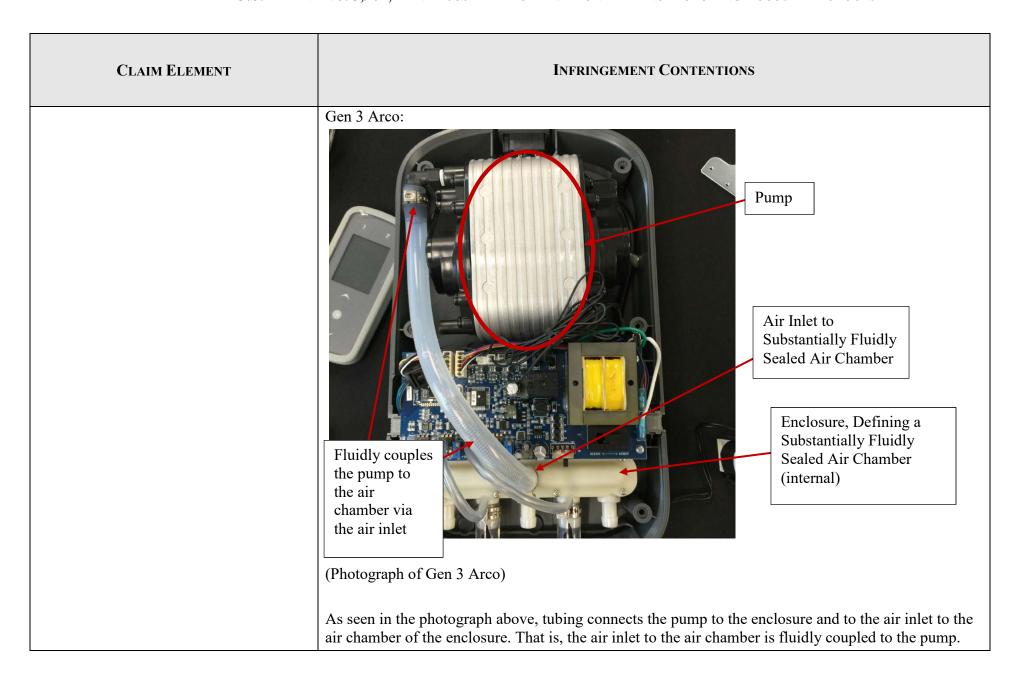
CLAIM ELEMENT INFRINGEMENT CONTENTIONS Internal Chamber Enclosing a Valve (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As seen in the photographs below, the enclosure of the Gen 3 Koge's valve enclosure assembly is comprised of an enclosure and a rear cover. The valve seal is contained within the enclosure, which shows how the enclosure and rear cover define an internal air chamber enclosing a valve.
	Rear Cover of the Valve Enclosure Assembly Internal air chamber enclosing a valve Enclosure of the Valve Enclosure Assembly
	Enclosure Enclosure with Rear Cover Removed
	(Photograph of the Gen 3 Koge)

CLAIM ELEMENT	Infringement Contentions
[2.1] an enclosure defining a substantially fluidly sealed air chamber and having at least one air inlet to the air chamber being fluidly coupled to the pump, a plurality of guides and stops being disposed within the enclosure for correctly positioning components within the enclosure; and	Under the plain and ordinary meaning of the claim terms in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge Air Controllers include an enclosure defining a substantially fluidly sealed air chamber and having at least one air inlet to the air chamber being fluidly coupled to the pump, a plurality of guides and stops being disposed within the enclosure for correctly positioning components within the enclosure. The Gen 3 Arco air controller includes an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber, which is fluidly coupled to the pump.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure, which defines a Substantially Fluidly Sealed Air Chamber (Photograph of Gen 3 Arco)

Page 28

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Inlet (Photograph of Gen 3 Arco) As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more O-rings, which assist in substantially fluidly sealing the air chamber.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in Substantially Fluidly Sealing the Air Chamber Air Chamber (Photograph of Gen 3 Arco's enclosure (depicted with the rear-cover removed for illustrative purposes).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in substantially fluidly sealing the air chamber Part of the enclosure defining a substantially fluidly sealed air chamber (Photograph of Gen 3 Arco's enclosure (depicted with solenoids removed).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen X air controller include an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber, which is fluidly coupled to the pump. Gen X: Pump Air inlet to the substantially fluidly sealed air chamber Fluidly couples the pump to the air chamber via the air inlet (Photograph of Gen X)

CLAIM ELEMENT	Infringement Contentions
	As seen in the photograph above, tubing connects the pump to the enclosure and to the air inlet to the air chamber of the enclosure. That is, the air inlet to the air chamber is fluidly coupled to the pump.
	Air Inlet to Substantially Fluidly Sealed Air Chamber of the Enclosure (Photograph of Gen X)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more O-rings, which assist in substantially fluidly sealing the air chamber. O-ring, which assists in Substantially Fluidly Sealing the Air Chamber (Photograph of Gen X's enclosure (depicted with the rear-cover and O-ring disassembled for illustrative purposes).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in substantially fluidly sealing the air chamber Part of the Enclosure defining a substantially fluidly sealed air chamber (Photograph of Gen X's enclosure (depicted with solenoids removed).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen 3 Koge air controller include an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber, which is fluidly coupled to the pump.
	Gen 3 Koge: Air Inlet to Substantially Fluidly Sealed Air Chamber Sealed Air Chamber Enclosure, Defining a Substantially Fluidly Sealed Air Chamber (internal) (Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS As seen in the photograph above, tubing connects the pump to the enclosure and to the air inlet to the air chamber of the enclosure. That is, the air inlet to the air chamber is fluidly coupled to the pump. Enclosure, which defines a Substantially Fluidly Sealed Air Chamber Inlet to substantially fluidly sealed enclosure (Photograph of Gen 3 Koge)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more interlocking connectors, which assist in substantially fluidly sealing the air chamber.
	Interlocking connectors Enclosure defining Substantially Fluidly Sealing the Air Chamber (Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Substantially Fluidly Sealed Air Chamber Enclosure (Photograph of Gen 3 Koge's enclosure (depicted detached from other enclosure components).) When the Gen 3 and Gen X air controllers inflate the one or more air bladders, the pump, tubing that connects the pump to the air inlet, air chamber, and tubing connecting the air chamber to the one or more air bladders creates a substantially fluidly sealed environment substantially fluidly sealing the air chamber. That is, the enclosure contains several fluid tight seals and the tubing connecting the air bladders and pump to the enclosure creates a fluidly sealed environment such that the air chamber defined by the enclosure is substantially fluidly sealed. To the extent this limitation is not literally present the limitation is met under the doctrine of equivalents because the substantially fluidly sealed

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

	environment performs substantially the same function as a substantially sealed air chamber in substantially the same way and to obtain the substantially same result. Accordingly, the air chamber defined by the enclosure meets the substantially fluidly sealed limitation.
l l	
	The Accused Products having a Gen 3 Arco air controller include a plurality of guides and stops disposed within the enclosure for correctly positioning components within the enclosure. Specifically, the enclosure of the Gen 3 Arco includes threaded guides or guide walls within the enclosure for correctly positioning solenoid components within the enclosure. The enclosure of the Gen 3 Arco further includes a raised valve seat, ledge, and/or O-ring to stop the component at the correct position within the enclosure.
	Enclosure Stops Guides (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen X air controller include a plurality of guides and stops disposed within the enclosure for correctly positioning solenoid components within the enclosure and a raised valve seat, ledge, and/or O-ring to stop the solenoid component(s) at the correct position within the enclosure.
	Enclosure
	Stops Guides
	(Photograph of Gen X)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen 3 Koge air controller include a plurality of guides and stops disposed within the enclosure for correctly positioning components within the enclosure. Specifically, the enclosure of the Gen 3 Koge includes guiding walls within the enclosure for correctly positioning components within the enclosure. The solenoid component extends into the enclosure until it intersects with a stop, i.e., a raised fitting, valve seat, or ledge, etc. within the enclosure to create a seal.
	Solenoid Component Location of Stop Guide
	(Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS The guiding wall guide and raised ledge stop can be further seen in the photograph below of a cross section of the enclosure of the enclosure assembly. Guide Stop Even under Defendants' constructions from the ITC proceeding, where a "guide" would be construed as "structures formed on the inner surface of the bottom of the enclosure to laterally position internal components," and a "stop" would be construed as "structures formed on the inner surface of the

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	bottom of the enclosure to limit the travel of internal components," ANM's Gen 3 or Gen X air controllers meet this claim limitation.
	The enclosure of the Gen 3 Arco includes threaded guides to laterally position internal solenoid components. The enclosure of the Gen 3 Arco further includes a raised valve seat, ledge, and/or Oring to limit travel of solenoid components. The enclosure further includes a plastic structure formed on the inner surface of the bottom of the enclosure to limit travel of internal components.
	Stops in the enclosure (Photograph of Gen 3 Arco)
	The enclosure of the Gen X includes threaded guides to laterally position internal solenoid components. The enclosure of the Gen X further includes a raised valve seat, ledge, and/or O-ring to

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	limit travel of solenoid components. The enclosure further includes a plastic structure formed on the inner surface of the bottom of the enclosure to limit travel of internal components. Enclosure Guides in the enclosure Bottom of the Enclosure (Photograph of Gen X)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The enclosure of the Gen 3 Koge includes guiding walls to laterally position solenoid components. The solenoid component extends into the enclosure until it is stopped by a stop configured to limit travel of the solenoid.
	Guiding wall structure formed on the bottom inner surface Location of stop

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

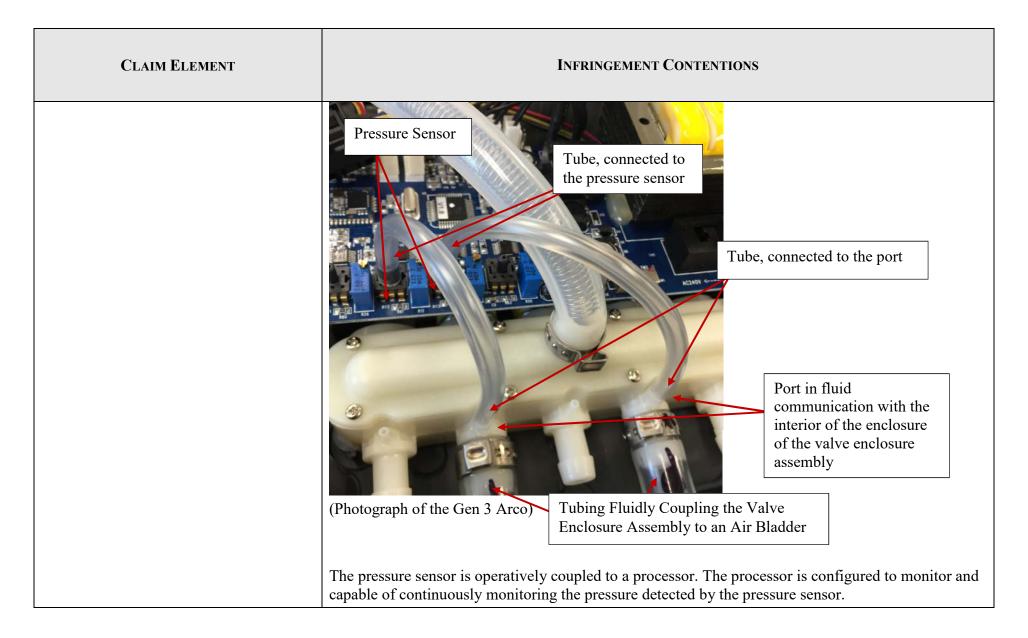
CLAIM ELEMENT	Infringement Contentions
	The guiding wall guide and stop can be further seen on an inner surface of the enclosure in the photograph below, a cross section of the enclosure of the enclosure assembly. Stop Guide Bottom of Enclosure

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
[2.2] pressure monitor means being operably coupled to the processor and being in fluid communication with the at least one bladder for continuously monitoring the pressure in the at least one bladder.	The "pressure monitor means" is a means-plus-function limitation subject to pre-AIA 35 U.S.C. § 112, ¶ 6. The function is continuously monitoring the pressure in the at least one bladder. The structure is a port fluidly coupled to the interior of the valve enclosure assembly that is designed to receive a tube, a pressure sensor, and a tube connected to the port and to the pressure sensor, and equivalents thereof. Under this construction, and where the other claim terms are given their plan and ordinary meaning in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers include a pressure monitor means being operably coupled to the processor and being in fluid communication with the at least one bladder for continuously monitoring the pressure in the at least one bladder.
	The valve enclosure assembly of the Accused Products having a Gen 3 Arco air controller include a pressure monitor means operably coupled to the processor. Specifically, the valve enclosure assembly of the Gen 3 Arco includes a pressure monitoring port, which is capable of being in fluid communication with the interior of the valve enclosure assembly. Gen 3 Arco:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Inlet Port in fluid communication with the interior of the enclosure of the valve enclosure assembly (Photograph of Gen 3 Arco) As seen, a tube is connected to the pressure monitoring port. The tube is also connected to a pressure sensor. In addition, and as discussed above, the pressure in the one or more air bladders is conveyed to the valve enclosure assembly via tubing that fluidly couples the enclosure to the air bladder(s). The bladder pressure is conveyed to the pressure sensor from the pressure monitoring port.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Circuit Board of Processor Pressure Sensor (Photograph of Gen 3 Arco) The pressure monitor means is in fluid communication with the at least one air bladder and capable of continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure sensor(s) to the pressure monitoring port(s) of the enclosure, the pressure sensor is capable of being in fluid communication with the enclosure of the valve enclosure assembly. Tubing fluidly couples the enclosure to the air bladder(s). The pressure sensor and the processor are therefore capable of continuously monitoring the pressure in the air bladder(s).

The valve enclosure assembly of the Accused Products having a Gen X air controller include a

pressure monitor means operably coupled to the processor. Specifically, the valve enclosure assembly of the Gen X includes a pressure monitoring port, which is capable of being in fluid communication

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	with the interior of the valve enclosure assembly.
	Gen X:
	Port to interior of the enclosure of the valve enclosure assembly
	(Photograph of Gen X) As seen, a tube is connected to the pressure monitoring port and to a pressure sensor. In addition, and as discussed above, the pressure in the one or more air bladders is conveyed to the valve enclosure

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	assembly via tubing that fluidly couples the enclosure to the air bladder(s). The bladder pressure is conveyed to the pressure sensor from the pressure monitoring port. Pressure Sensor Tube, connected to the pressure sensor and pressure monitoring port Port in fluid communication with the interior of the enclosure of the valve enclosure assembly Fluidly couples the enclosure of the Valve Enclosure Assembly to an Air Bladder

CLAIM ELEMENT	Infringement Contentions
	The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor. Pressure Sensor Circuit Board of Processor (Photograph of Gen X)

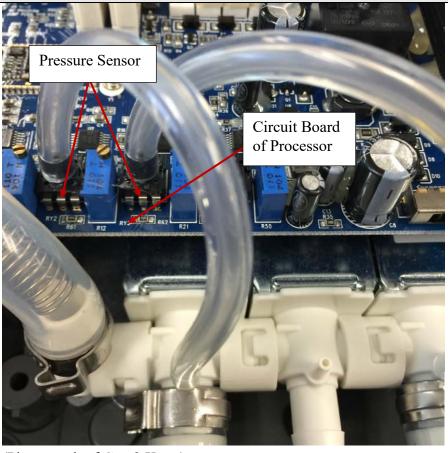
EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The pressure monitor means is in fluid communication with the at least one air bladder and capable of continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure sensor(s) to the pressure monitoring port(s) of the enclosure, the pressure sensor is capable of being in fluid communication with the enclosure of the valve enclosure assembly. Tubing fluidly couples the enclosure to the air bladder(s). The pressure sensor and the processor are therefore capable of continuously monitoring the pressure in the air bladder(s).
	The Accused Products having a Gen 3 Koge air controller include pressure monitor means operably coupled to the processor. Specifically, the enclosure of the valve enclosure assembly of the Gen 3 Koge includes a pressure monitoring port in fluid communication with the interior of the enclosure and the air bladder.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Koge: 8 Port in fluid communication with the interior of the enclosure of the valve enclosure assembly (Photograph of Gen 3 Koge) As seen, a tube is connected to the pressure monitoring port. The tube is also connected to a pressure sensor. In addition, and as discussed above, the pressure in the one or more air bladders is conveyed to the valve enclosure assembly via tubing that fluidly couples the enclosure to the air bladder(s). The air bladder pressure is conveyed to the pressure sensor from the pressure monitoring port.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Pressure Sensor Tube, connected to the pressure sensor Tube, connected to the port Tubing Fluidly Port in fluid Coupling the communication with the Valve interior of the enclosure Enclosure of the valve enclosure Assembly to an assembly Air Bladder (Photograph of the Gen 3 Koge) The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor.

INFRINGEMENT CONTENTIONS



(Photograph of Gen 3 Koge)

CLAIM ELEMENT

The pressure monitor means is in fluid communication with the at least one air bladder and capable of continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure sensor(s) to the pressure monitoring port(s) of the enclosure, the pressure sensor is capable of being in

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	fluid communication with the enclosure of the valve enclosure assembly. Tubing fluidly couples the enclosure to the air bladder(s). The pressure sensor and the processor are therefore capable of continuously monitoring the pressure in the air bladder(s).
	Versions 1.8, 1.97, and 2.0 of ANM's source code further demonstrate that Gen 3 Accused Products' processors are configured to monitor and do continuously monitor, or are capable of continuously monitoring, the pressure detected by the pressure sensor(s).

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

CLAIM ELEMENT	Infringement Contentions
	This limitation may further implicate other electronics, software, firmware, and/or source code of the Accused Products. Additional Source Code for the Accused Products may further show how this claim limitation is met. To resolve a dispute regarding Plaintiff's Notice of Inspection for Source Code, the parties have agreed that Plaintiff shall be allowed to inspect remaining Source Code for the Accused Products on mutually agreeable date(s), after which Plaintiff shall supplement its

CLAIM ELEMENT	Infringement Contentions
	infringement contentions, pursuant to an agreed-upon timeline and without opposition, using the information learned during the inspection.
Claim 6	
[6.P] An improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air, a pump fluidly coupled to the at least one air bladder for providing compressed air thereto, and a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle, the	The preamble of claim 6 is limiting and under the plain and ordinary meaning of these claim terms in light of the specification, each claim limitation is met by ANM's Accused Products. Specifically, the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air, a pump fluidly coupled to the at least one air bladder for providing compressed air thereto, and a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle, the improved valve enclosure assembly being fluidly coupled intermediate the pump and the at least one air bladder for controlling the inflation of the at least one air bladder.
improved valve enclosure assembly being fluidly coupled intermediate the pump and the at least one air bladder for controlling the inflation of the at least one air bladder, comprising:	The Accused Products having a Gen 3 Arco air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Arco) The Accused Products having a Gen X air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure of Valve Enclosure Assembly (Photograph of Gen X) The Accused Products having a Gen 3 Koge air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure of Valve Enclosure Assembly

(Photograph of Gen 3 Koge)

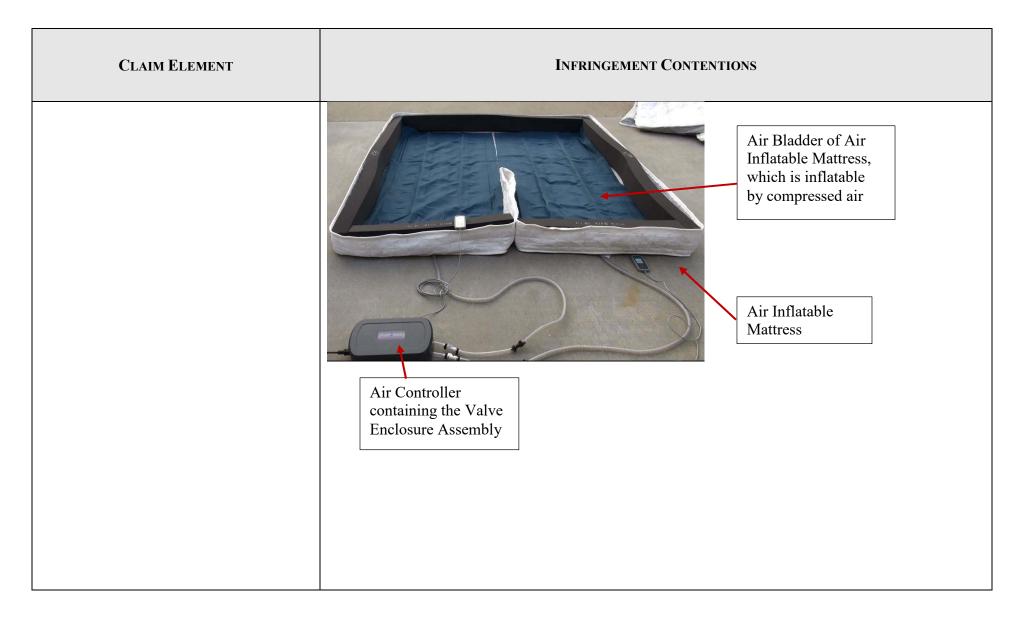
The valve enclosure assemblies of the Gen 3 Arco, Gen X, and Gen 3 Koge are used with an air inflatable mattress having at least one air bladder inflated by compressed air. Non-limiting examples of said use is shown in the photographs below.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Air Inflatable Mattress Air Controller containing the Valve Enclosure Assembly

68

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Air Bladder of Air Inflatable Mattress, inflated by compressed air Air Bladder of Air Inflatable Mattress, deflated Air Bladder of Air Inflatable Mattress, which is inflatable by compressed air

Page 70

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Air Inflatable Bladders of Air Mattress Inflatable Mattress. which are inflatable by compressed air 31 🔆 🎯 🗒 Air Controller containing the Valve **Enclosure Assembly** (Photograph of medical air mattress system) In the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers, the pump is fluidly coupled to the at least one air bladder for providing compressed air thereto. In the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers, the improved valve enclosure assembly is fluidly coupled intermediate the pump and the at least one air bladder for controlling the inflation of the at least one air bladder. As shown in the photographs below, the pump is fluidly coupled to the enclosure of the valve enclosure assembly via tubing. The enclosure of the valve enclosure assembly is then similarly fluidly coupled to the at least one air bladder with tubing. The pump provides compressed air to the at least one air bladder via the tubing between the pump and the enclosure of the valve enclosure assembly and the tubing between the valve enclosure assembly and the air bladder.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Pump Tubing Fluidly Coupling the Pump to the Valve Enclosure Assembly Enclosure of Valve Enclosure Assembly Tubing Fluidly Coupling the Pump to the Valve Enclosure Assembly Pump Tubing Fluidly Coupling the Enclosure Assembly (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	Pum Valv	Pump ing Fluidly Coupling the property to the Enclosure of the Enclosure Assembly Enclosure of Valve Enclosure Assembly aidly Couples the closure of Valve Closure Assembly to Air Bladder

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Gen 3 Koge: Tubing Fluidly Coupling the Pump to the Enclosure of Valve Enclosure Assembly Enclosure Fluidly Coupling the Enclosure Assembly Tubing Fluidly Coupling the Enclosure of Valve Enclosure Assembly to an Air Bladder (Photograph of Gen 3 Koge)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As shown in the example of a Gen 3 air controller being used with an inflatable air matress, the two tubes that fluidly couple to the valve enclosure assembly fluidly couple to the air bladders of the inflatable air matress. Because the pump is fluidly coupled to the air bladder, the air bladders inflate using the compressed air from the pump.
	Air Bladders of Air Inflatable Mattress, which are inflated using compressed air
	Tubing Fluidly Coupling the Valve Enclosure Assembly to an Air Bladder
	Air Controller containing the Valve Enclosure Assembly
	In the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers, a processor provides commands to the improved valve enclosure assembly during an inflate/deflate cycle:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Arco: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Arco)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen X: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen X)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Koge: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Koge) Versions 1.8, 1.97, and 2.0 of ANM's source code further demonstrate that the Gen 3 Accused Products include a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

Infringement Contentions

Page 79

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	This limitation may further implicate other electronics, software, firmware, and/or source code of the Accused Products. Additional Source Code for the Accused Products may further show how this claim limitation is met. To resolve a dispute regarding Plaintiff's Notice of Inspection for Source Code, the parties have agreed that Plaintiff shall be allowed to inspect remaining Source Code for the Accused Products on mutually agreeable date(s), after which Plaintiff shall supplement its

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	infringement contentions, pursuant to an agreed-upon timeline and without opposition, using the information learned during the inspection.
	Even under Defendants' construction from the ITC proceeding, where a "valve enclosure assembly" means "an enclosure and a rear cover defining an internal, pressurized air chamber enclosing a valve," ANM's Gen 3 or Gen X air controllers meet this claim limitation.
	As seen in the photographs below, the enclosure of the Gen 3 Arco's valve enclosure assembly is comprised of an enclosure and a rear cover. Rear Cover of the Valve Enclosure Assembly Internal air chamber
	the Valve Enclosure Assembly
	Enclosure Enclosure with Rear Cover Removed
	(Photograph of the Gen 3 Arco)

CLAIM ELEMENT	Infringement Contentions
	Furthermore, as seen in the photograph below showing a side perspective view of the Gen 3 Arco's enclosure, the Gen 3 Arco the internal chamber is shown enclosing a valve.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Perspective view of the internal chamber enclosing a valve (Photograph of Gen 3 Arco)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS As seen in the photographs below, the enclosure of the Gen X's valve enclosure assembly is comprised of an enclosure and a rear cover. Rear Cover of the Valve **Enclosure Assembly** Internal air chamber Enclosure of the Valve Enclosure Assembly (Photograph of the Gen 3 Arco) Furthermore, as seen in the photograph below showing a side perspective view of the Gen 3 Arco's enclosure, the Gen 3 Arco the internal chamber is shown enclosing a valve.

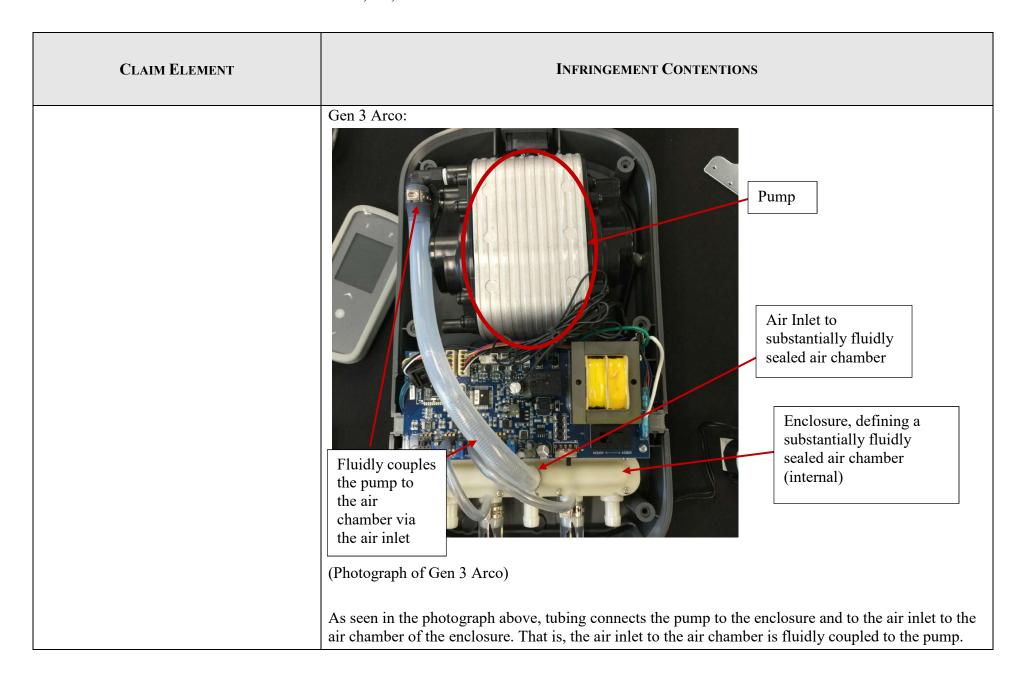
CLAIM ELEMENT INFRINGEMENT CONTENTIONS Internal Chamber Enclosing a Valve (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As seen in the photographs below, the enclosure of the Gen 3 Koge's valve enclosure assembly is comprised of an enclosure and a rear cover. The valve seal is contained within the enclosure, which shows how the enclosure and rear cover define an internal air chamber enclosing a valve.
	Rear Cover of the Valve Enclosure Assembly Internal air chamber enclosing a valve Enclosure of the Valve Enclosure Assembly
	Enclosure Enclosure with Rear Cover Removed
	(Photograph of the Gen 3 Koge)

CLAIM ELEMENT	Infringement Contentions
[6.1] an enclosure defining a substantially fluidly sealed air chamber and having at least one air inlet to the air chamber being fluidly coupled to the pump, the enclosure being formed of an enclosure portion and a rear cover portion, a flexible seal being compressively interposed between the enclosure portion and a rear cover portion to effect a substantially fluid tight seal therebetween; and	Under the plain and ordinary meaning of the claim terms in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers include an enclosure defining a substantially fluidly sealed air chamber and having at least one air inlet to the air chamber being fluidly coupled to the pump, the enclosure being formed of an enclosure portion and a rear cover portion, a flexible seal being compressively interposed between the enclosure portion and a rear cover portion to effect a substantially fluid tight seal therebetween. The Accused Products having a Gen 3 Arco air controller include a valve enclosure assembly comprised, in part, of an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber and which is fluidly coupled to the pump.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure, which defines a Substantially Fluidly Sealed Air Chamber (Photograph of Gen 3 Arco)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Inlet (Photograph of Gen 3 Arco) As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more O-rings, which assist in substantially fluidly sealing the air chamber.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in substantially fluidly sealing the air chamber Air Chamber (Photograph of Gen 3 Arco's enclosure (depicted with the rear-cover removed for illustrative purposes).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Part of enclosure defining a substantially fluidly sealing the air chamber Part of enclosure defining a substantially fluidly sealed air chamber (Photograph of Gen 3 Arco's enclosure (depicted with solenoids removed).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen X air controller include a valve enclosure assembly comprised, in part, of an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber and which is fluidly coupled to the pump. Gen X: Pump Pump Air Inlet to Substantially Fluidly Sealed Air Chamber Fluidly couples pump to the air chamber via the air inlet (Photograph of Gen X)

CLAIM ELEMENT	Infringement Contentions
	As seen in the photograph above, tubing connects the pump to the enclosure and to the air inlet to the air chamber of the enclosure. That is, the air inlet to the air chamber is fluidly coupled to the pump. Air inlet to substantially fluidly sealed air chamber of the enclosure (Photograph of Gen X)
	As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more O-rings, which assist in substantially fluidly sealing the air chamber.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in Substantially Fluidly Sealing the Air Chamber (Photograph of Gen X's enclosure (depicted with the rear-cover and O-ring disassembled for illustrative purposes)

EXHIBIT 2072

Page 96

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in Substantially Fluidly Sealing the Air Chamber Part of enclosure defining a Substantially Fluidly Sealed Air Chamber (Photograph of Gen X's enclosure (depicted with a solenoid removed).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen 3 Koge air controller include an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber, which is fluidly coupled to the pump.
	Gen 3 Koge: Air Inlet to Tubing that fluidly
	Air Inlet to Substantially Fluidly Sealed Air Chamber Tubing that fluidly couples the pump to the air chamber via the air inlet
	Pump
	Enclosure, Defining a Substantially Fluidly Sealed Air Chamber (internal) (Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS As seen in the photograph above, tubing connects the pump to the enclosure and to the air inlet to the air chamber of the enclosure. That is, the air inlet to the air chamber is fluidly coupled to the pump. Enclosure, which defines a Substantially Fluidly Sealed Air Chamber Inlet to substantially fluidly sealed enclosure (Photograph of Gen 3 Koge)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more interlocking connectors, which assist in substantially fluidly sealing the air chamber.
	Enclosure defining a substantially fluidly sealed air chamber (Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Substantially Fluidly Sealed Air Chamber Enclosure (Photograph of Gen 3 Koge's enclosure (depicted detached from other enclosure components).) When the Gen 3 and Gen X air controllers inflate the one or more air bladders, the pump, tubing that connects the pump to the air inlet, air chamber, and tubing connecting the air chamber to the one or more air bladders creates a substantially fluidly sealed environment substantially fluidly sealing the air chamber. That is, the enclosure contains several fluid tight seals and the tubing connecting the air bladders and pump to the enclosure creates a fluidly sealed environment such that the air chamber defined by the enclosure is substantially fluidly sealed. To the extent this limitation is not literally present the limitation is met under the doctrine of equivalents because the substantially fluidly sealed

CLAIM ELEMENT	Infringement Contentions
	environment performs substantially the same function as a substantially sealed air chamber in substantially the same way and to obtain the substantially same result. Accordingly, the air chamber defined by the enclosure meets the substantially fluidly sealed limitation.
	The Accused Products having a Gen 3 Arco air controller further include an enclosure being formed of an enclosure portion and a rear cover portion, a flexible seal being compressively interposed between the enclosure portion and a rear cover portion to effect a substantially fluid tight seal therebetween.
	As seen in the photographs below, the Gen 3 Arco's enclosure of the valve enclosure assembly is comprised of an enclosure portion and a rear cover portion. Furthermore, a flexible seal is compressively interposed between the enclosure portion and the rear cover portion, thereby creating a substantially fluid tight seal between the enclosure portion and the rear cover portion.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

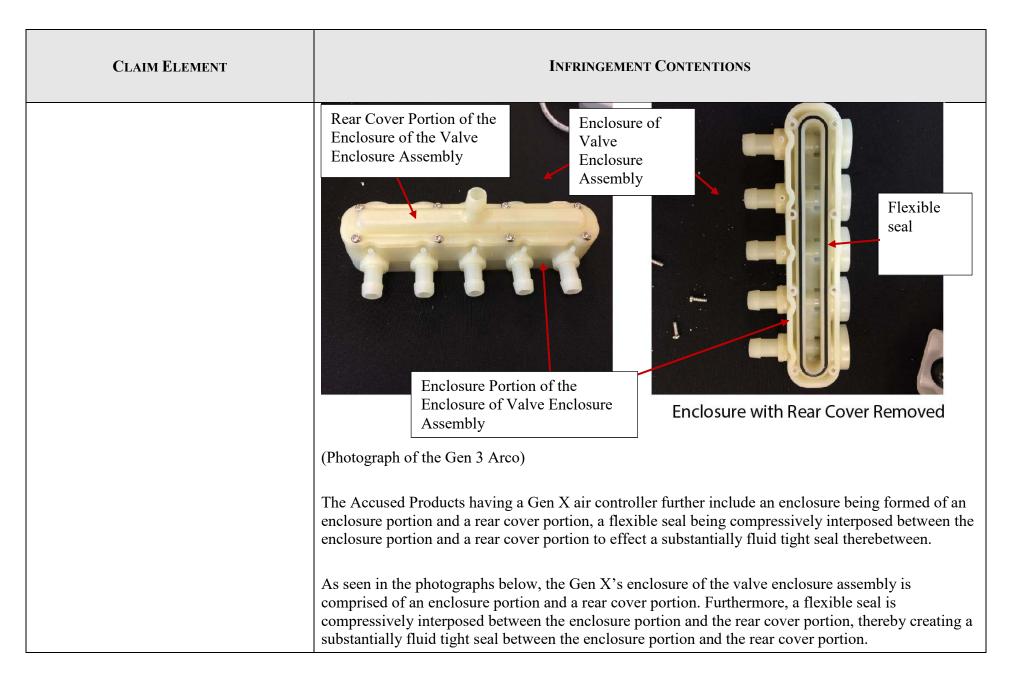


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

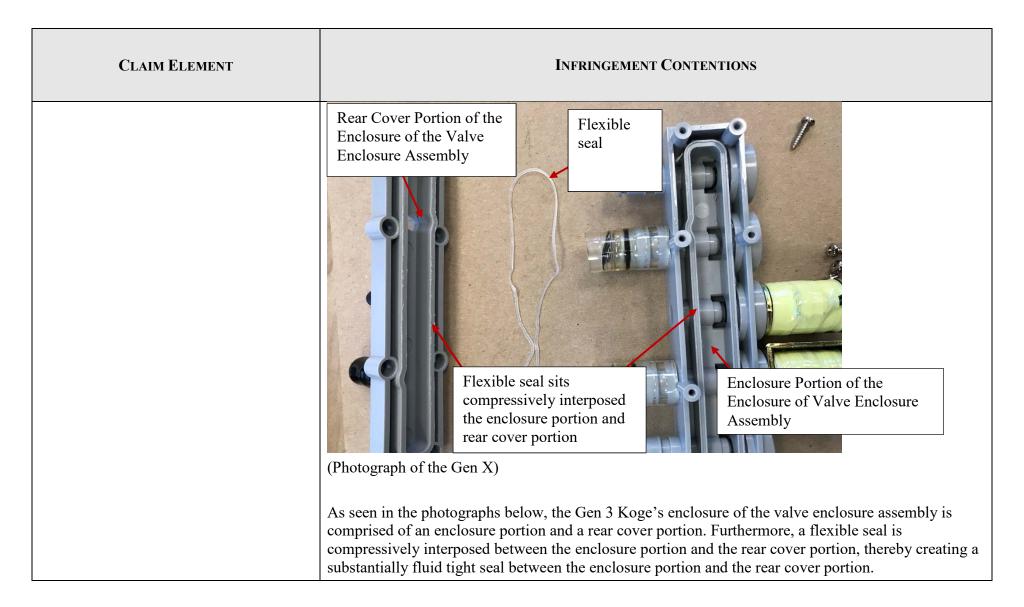


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Rear Cover Portion of the Enclosure Enclosure of Valve Enclosure Assembly with Rear Cover Portion Removed [Photograph of the Gen 3 Koge]
[6.2] pressure monitor means being operably coupled to the processor and being in fluid communication with the at least one bladder for continuously	The "pressure monitor means" is a means-plus-function limitation subject to pre-AIA 35 U.S.C. § 112, ¶ 6. The function is continuously monitoring the pressure in the at least one bladder. The structure is a port fluidly coupled to the interior of the valve enclosure assembly that is designed to receive a tube, a pressure sensor, and a tube connected to the port and to the pressure sensor, and

CLAIM ELEMENT	Infringement Contentions
monitoring the pressure in the at least one bladder.	equivalents thereof. Under this construction, and where the other claim terms are given their plan and ordinary meaning in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers include a pressure monitor means being operably coupled to the processor and being in fluid communication with the at least one bladder for continuously monitoring the pressure in the at least one bladder.
	The valve enclosure assembly of the Accused Products having a Gen 3 Arco air controller include a pressure monitor means operably coupled to the processor. Specifically, the valve enclosure assembly of the Gen 3 Arco includes a pressure monitoring port, which is capable of being in fluid communication with the interior of the valve enclosure assembly. Gen 3 Arco:
	Air Inlet Port in fluid
	communication with the interior of the enclosure of the valve enclosure assembly (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As seen, a tube is connected to the pressure monitoring port. The tube is also connected to a pressure sensor. In addition, and as discussed above, the pressure in the one or more air bladders is conveyed to the valve enclosure assembly via tubing that fluidly couples the enclosure to the air bladder(s). The bladder pressure is conveyed to the pressure sensor from the pressure monitoring port.
	Pressure Sensor Tube, connected to the pressure sensor Tube, connected to the port Port in fluid communication with the interior of the enclosure of the valve enclosure assembly Tubing Fluidly Coupling the Valve Enclosure Assembly to an Air Bladder

CLAIM ELEMENT INFRINGEMENT CONTENTIONS The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor. Circuit Board of Processor Pressure Sensor (Photograph of Gen 3 Arco) The pressure monitor means is in fluid communication with the at least one air bladder and capable of continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure sensor(s) to the pressure monitoring port(s) of the enclosure, the pressure sensor is capable of being in fluid communication with the enclosure of the valve enclosure assembly. Tubing fluidly couples the enclosure to the air bladder(s). The pressure sensor and the processor are therefore capable of continuously monitoring the pressure in the air bladder(s).

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	The valve enclosure assembly of the Accused Products having a Gen X air controller include a pressure monitor means operably coupled to the processor. Specifically, the valve enclosure assembly of the Gen X includes a pressure monitoring port, which is capable of being in fluid communication with the interior of the valve enclosure assembly.	
	Gen X: Port to interior of the enclosure of the valve enclosure assembly	
	Pressure monitoring port	
	(Photograph of Gen X)	

EXHIBIT 2072 IPR2019-00514

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT		Infringement Contentions	
	as discussed above, the pressure assembly via tubing that fluidly	comminterio	I to the valve enclosure The bladder pressure is In fluid The flu

CLAIM ELEMENT	Infringement Contentions
	The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor. Pressure Sensor Circuit Board of Processor (Photograph of Gen X)

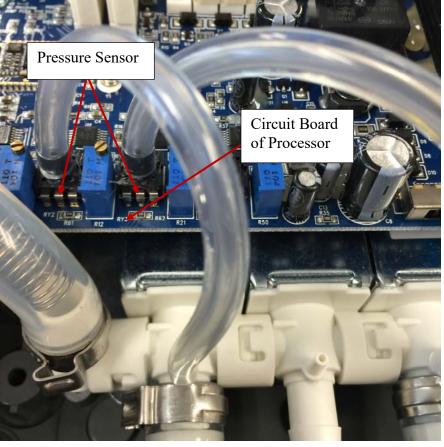
EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The pressure monitor means is in fluid communication with the at least one air bladder and capable of continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure sensor(s) to the pressure monitoring port(s) of the enclosure, the pressure sensor is capable of being in fluid communication with the enclosure of the valve enclosure assembly. Tubing fluidly couples the enclosure to the air bladder(s). The pressure sensor and the processor are therefore capable of continuously monitoring the pressure in the air bladder(s).
	The Accused Products having a Gen 3 Koge air controller include pressure monitor means operably coupled to the processor. Specifically, the enclosure of the valve enclosure assembly of the Gen 3 Koge includes a pressure monitoring port in fluid communication with the interior of the enclosure and the air bladder.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Koge: 8 Port in fluid communication with the interior of the enclosure of the valve enclosure assembly (Photograph of Gen 3 Koge) As seen, a tube is connected to the pressure monitoring port. The tube is also connected to a pressure sensor. In addition, and as discussed above, the pressure in the one or more air bladders is conveyed to the valve enclosure assembly via tubing that fluidly couples the enclosure to the air bladder(s). The air bladder pressure is conveyed to the pressure sensor from the pressure monitoring port.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Pressure Sensor Tube, connected to the pressure sensor Tube, connected to the port Tubing Fluidly Port in fluid Coupling the communication with the Valve interior of the enclosure Enclosure of the valve enclosure Assembly to an assembly Air Bladder (Photograph of the Gen 3 Koge) The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor.

Infringement Contentions



(Photograph of Gen 3 Koge)

CLAIM ELEMENT

The pressure monitor means is in fluid communication with the at least one air bladder and capable of continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure sensor(s) to the pressure monitoring port(s) of the enclosure, the pressure sensor is capable of being in

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	fluid communication with the enclosure of the valve enclosure assembly. Tubing fluidly couples the enclosure to the air bladder(s). The pressure sensor and the processor are therefore capable of continuously monitoring the pressure in the air bladder(s).
	Versions 1.8, 1.97, and 2.0 of ANM's source code further demonstrate that the Gen 3 Accused Products' processors are configured to monitor and do continuously monitor, or are capable of continuously monitoring, the pressure detected by the pressure sensor(s).

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

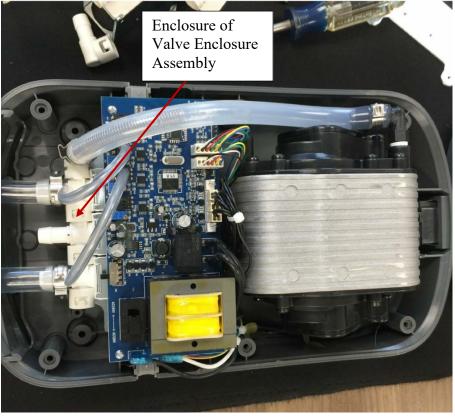
CLAIM ELEMENT	Infringement Contentions	
	This limitation was firstly a invalidate other alectronics as formal formal and a fitter	
	This limitation may further implicate other electronics, software, firmware, and/or source code of the Accused Products. Additional Source Code for the Accused Products may further show how this claim limitation is met. To resolve a dispute regarding Plaintiff's Notice of Inspection for Source Code, the parties have agreed that Plaintiff shall be allowed to inspect remaining Source Code for the Accused Products on mutually agreeable date(s), after which Plaintiff shall supplement its	

CLAIM ELEMENT	Infringement Contentions	
	infringement contentions, pursuant to an agreed-upon timeline and without opposition, using the information learned during the inspection.	
Claim 12		
[12.P] An improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air, a pump fluidly coupled to the at least one air bladder for providing compressed air thereto, and a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle, the improved valve enclosure assembly being fluidly coupled intermediate the pump and the at least one air bladder for controlling the inflation of the at least one air bladder, comprising:	The preamble of claim 12 is limiting and under the plain and ordinary meaning of these claim terms in light of the specification, each claim limitation is met by ANM's Accused Products. Specifically, the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air, a pump fluidly coupled to the at least one air bladder for providing compressed air thereto, and a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle, the improved valve enclosure assembly being fluidly coupled intermediate the pump and the at least one air bladder for controlling the inflation of the at least one air bladder. The Accused Products having a Gen 3 Arco air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:	

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Arco) The Accused Products having a Gen X air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure of Valve Enclosure Assembly (Photograph of Gen X) The Accused Products having a Gen 3 Koge air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:

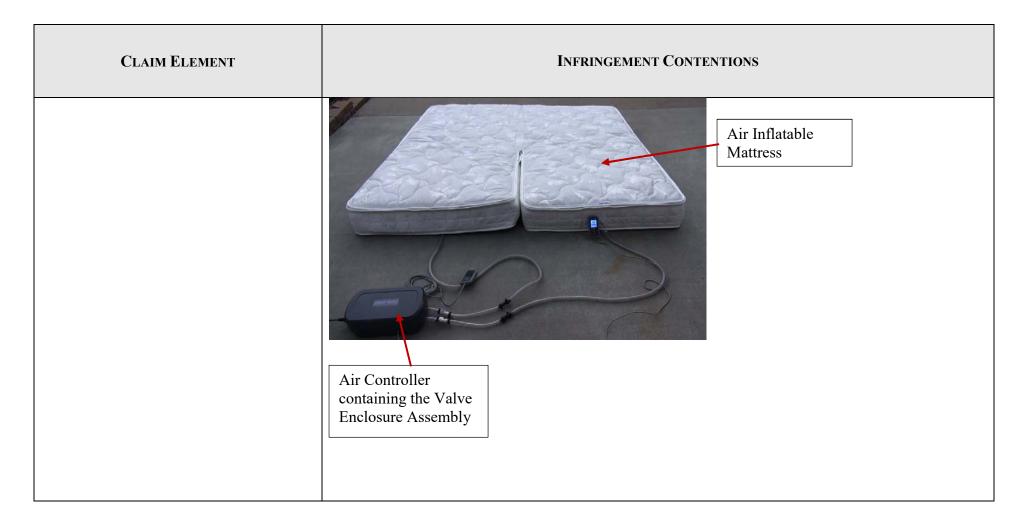
CLAIM ELEMENT INFRINGEMENT CONTENTIONS



(Photograph of Gen 3 Koge)

The valve enclosure assemblies of the Gen 3 Arco, Gen X, and Gen 3 Koge are used with an air inflatable mattress having at least one air bladder inflated by compressed air. Non-limiting examples of said use is shown in the photographs below.

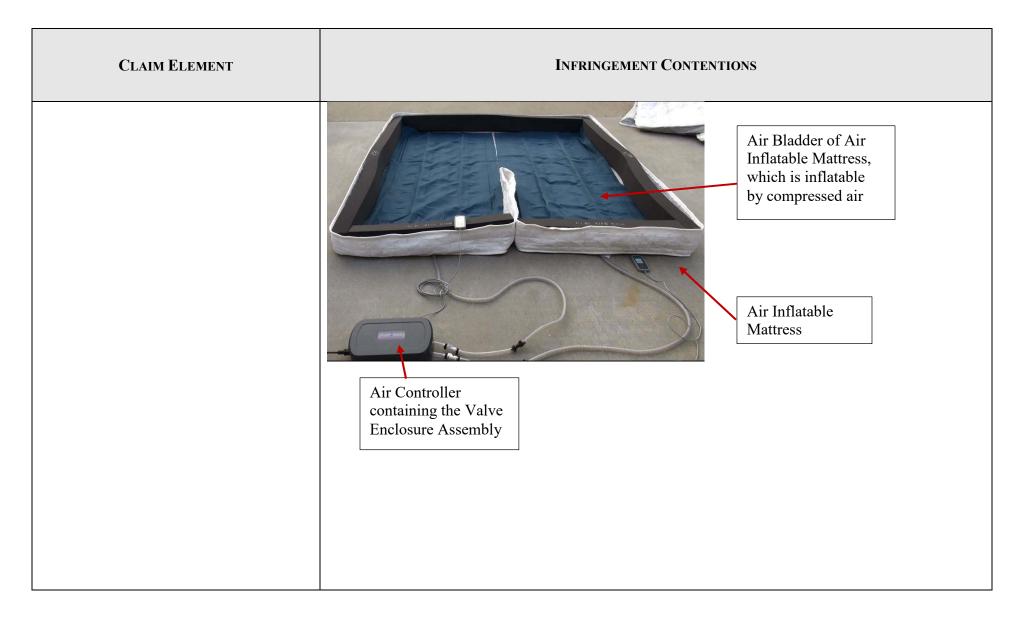
EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



HIGHLY CONFIDENTIAL SOURCE CODE - OUTSIDE COUNSEL ONLY

Page 125

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Air Bladder of Air Inflatable Mattress, inflated by compressed air Air Bladder of Air Inflatable Mattress, deflated Air Bladder of Air Inflatable Mattress, which is inflatable by compressed air

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

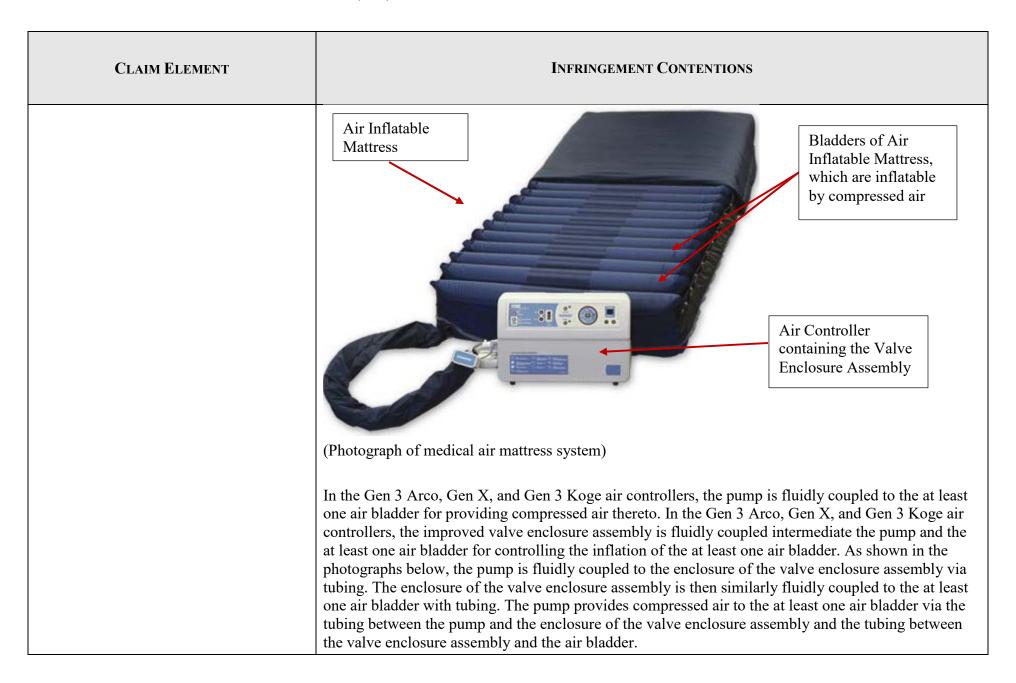


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Pump Tubing Fluidly Coupling the Pump to the Valve Enclosure Assembly Enclosure of Valve Enclosure Assembly Tubing Fluidly Coupling the Pump to the Valve Enclosure Assembly (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	Pum Valv	Pump ing Fluidly Coupling the property to the Enclosure of the Enclosure Assembly Enclosure of Valve Enclosure Assembly aidly Couples the closure of Valve Closure Assembly to Air Bladder

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Gen 3 Koge: Tubing Fluidly Coupling the Pump to the Enclosure of Valve Enclosure Assembly Pump Enclosure of Valve Enclosure of Valve Enclosure Assembly Coupling the Enclosure of Valve Enclosure Assembly to an Air Bladder (Photograph of Gen 3 Koge)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As shown in the example of a Gen 3 air controller being used with an inflatable air matress, the two tubes that fluidly couple to the valve enclosure assembly fluidly couple to the air bladders of the inflatable air matress. Because the pump is fluidly coupled to the air bladder, the air bladders inflate using the compressed air from the pump. Air Bladders of Air Inflatable Mattress, which are inflated using compressed air Tubing Fluidly Coupling the Valve Enclosure Assembly to an Air Bladder In the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers, a processor provides commands to the improved valve enclosure assembly during an inflate/deflate cycle:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Arco: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Arco)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen X: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen X)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Koge: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Koge) Versions 1.8, 1.9, 1.92, 1.97, and 2.0 of ANM's source code further demonstrate that the Gen 3 Accused Products include a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	This limitation may further implicate other electronics, software, firmware, and/or source code of the Accused Products. Additional Source Code for the Accused Products may further show how this claim limitation is met. To resolve a dispute regarding Plaintiff's Notice of Inspection for Source Code, the parties have agreed that Plaintiff shall be allowed to inspect remaining Source Code for the Accused Products on mutually agreeable date(s), after which Plaintiff shall supplement its infringement contentions, pursuant to an agreed-upon timeline and without opposition, using the information learned during the inspection.
	Even under Defendants' construction from the ITC proceeding, where a "valve enclosure assembly" means "an enclosure and a rear cover defining an internal, pressurized air chamber enclosing a valve," ANM's Gen 3 or Gen X air controllers meet this claim limitation.
	As seen in the photographs below, the enclosure of the Gen 3 Arco's valve enclosure assembly is comprised of an enclosure and a rear cover.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	t l	Enclosure of the Valve Enclosure Assembly
	Enclosure	Enclosure with Rear Cover Removed
	(Photograph of the Gen 3 Arco)	
	Furthermore, as seen in the photograph b enclosure, the Gen 3 Arco the internal ch	elow showing a side perspective view of the Gen 3 Arco's amber is shown enclosing a valve.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Perspective view of the internal chamber enclosing a valve (Photograph of Gen 3 Arco)
	(1 hotograph of Gen 3 Areo)

Page 142

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS As seen in the photographs below, the enclosure of the Gen X's valve enclosure assembly is comprised of an enclosure and a rear cover. Rear Cover of the Valve **Enclosure Assembly** Internal air chamber Enclosure of the Valve Enclosure Assembly (Photograph of the Gen 3 Arco) Furthermore, as seen in the photograph below showing a side perspective view of the Gen 3 Arco's enclosure, the Gen 3 Arco the internal chamber is shown enclosing a valve.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Internal Chamber Enclosing a Valve (Photograph of Gen 3 Arco)

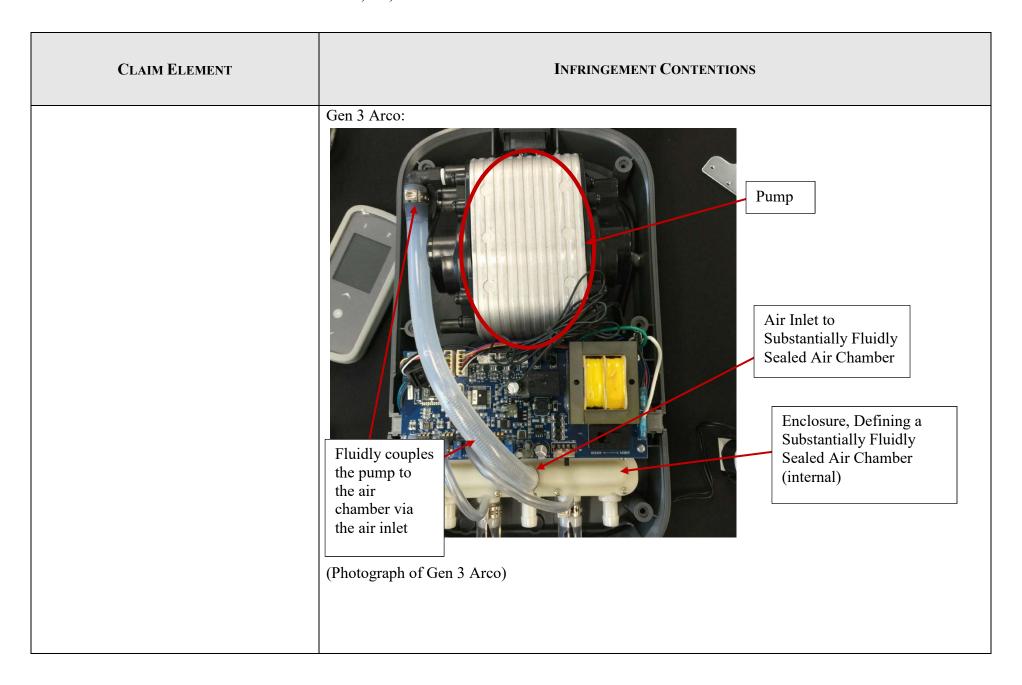
144

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As seen in the photographs below, the enclosure of the Gen 3 Koge's valve enclosure assembly is comprised of an enclosure and a rear cover. The valve seal is contained within the enclosure, which shows how the enclosure and rear cover define an internal air chamber enclosing a valve.
	Rear Cover of the Valve Enclosure Assembly Internal air chamber enclosing a valve Enclosure of the Valve Enclosure Assembly
	Enclosure Enclosure with Rear Cover Removed
	(Photograph of the Gen 3 Koge)

CLAIM ELEMENT	Infringement Contentions
[12.1] an enclosure defining a substantially fluidly sealed air chamber and having at least one air inlet to the air chamber being fluidly coupled to the pump, a plurality of guides and stops being disposed within the enclosure for correctly positioning components within the enclosure;	Under the plain and ordinary meaning of the claim terms in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge Air Controllers include an enclosure defining a substantially fluidly sealed air chamber and having at least one air inlet to the air chamber being fluidly coupled to the pump, a plurality of guides and stops being disposed within the enclosure for correctly positioning components within the enclosure. The Gen 3 Arco air controller includes an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber, which is fluidly coupled to the pump.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS As seen in the photograph above, tubing connects the pump to the enclosure and to the air inlet to the air chamber of the enclosure. That is, the air inlet to the air chamber is fluidly coupled to the pump. Enclosure, which defines a Substantially Fluidly Sealed Air Chamber (Photograph of Gen 3 Arco)

EXHIBIT 2072

Page 148

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Inlet (Photograph of Gen 3 Arco) As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more O-rings, which assist in substantially fluidly sealing the air chamber.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in Substantially Fluidly Sealing the Air Chamber Air Chamber (Photograph of Gen 3 Arco's enclosure (depicted with the rear-cover removed for illustrative purposes).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in substantially fluidly sealing the air chamber Part of the enclosure defining a substantially fluidly sealed air chamber (Photograph of Gen 3 Arco's enclosure (depicted with solenoids removed).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen X air controller include an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber, which is fluidly coupled to the pump. Gen X: Pump Air inlet to the substantially fluidly sealed air chamber Fluidly couples the pump to the air chamber via the air inlet (Photograph of Gen X)

CLAIM ELEMENT	Infringement Contentions
	As seen in the photograph above, tubing connects the pump to the enclosure and to the air inlet to the air chamber of the enclosure. That is, the air inlet to the air chamber is fluidly coupled to the pump. Air Inlet to Substantially Fluidly Scaled Air Chamber of the Enclosure (Photograph of Gen X)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more O-rings, which assist in substantially fluidly sealing the air chamber. O-ring, which assists in Substantially Fluidly Sealing the Air Chamber (Photograph of Gen X's enclosure (depicted with the rear-cover and O-ring disassembled for illustrative purposes).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in substantially fluidly sealing the air chamber Part of the Enclosure defining a substantially fluidly sealed air chamber (Photograph of Gen X's enclosure (depicted with solenoids removed).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen 3 Koge air controller include an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber, which is fluidly coupled to the pump.
	Gen 3 Koge: Air Inlet to Substantially Fluidly Sealed Air Chamber Fluidly couples the pump to the air chamber via the air inlet Pump Enclosure, Defining a Substantially Fluidly Sealed Air Chamber (internal) Photograph of Gen 3 Koge)
	(Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS As seen in the photograph above, tubing connects the pump to the enclosure and to the air inlet to the air chamber of the enclosure. That is, the air inlet to the air chamber is fluidly coupled to the pump. Enclosure, which defines a Substantially Fluidly Sealed Air Chamber Inlet to substantially fluidly sealed enclosure (Photograph of Gen 3 Koge)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more interlocking connectors, which assist in substantially fluidly sealing the air chamber.
	Interlocking connectors Enclosure defining Substantially Fluidly Sealing the Air Chamber (Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Substantially Fluidly Sealed Air Chamber Enclosure (Photograph of Gen 3 Koge's enclosure (depicted detached from other enclosure components).) When the Gen 3 and Gen X air controllers inflate the one or more air bladders, the pump, tubing that connects the pump to the air inlet, air chamber, and tubing connecting the air chamber to the one or more air bladders creates a substantially fluidly sealed environment substantially fluidly sealing the air chamber. That is, the enclosure contains several fluid tight seals and the tubing connecting the air bladders and pump to the enclosure creates a fluidly sealed environment such that the air chamber defined by the enclosure is substantially fluidly sealed. To the extent this limitation is not literally present the limitation is met under the doctrine of equivalents because the substantially fluidly sealed

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	environment performs substantially the same function as a substantially sealed air chamber in substantially the same way and to obtain the substantially same result. Accordingly, the air chamber defined by the enclosure meets the substantially fluidly sealed limitation.
	The Accused Products having a Gen 3 Arco air controller include a plurality of guides and stops disposed within the enclosure for correctly positioning components within the enclosure. Specifically, the enclosure of the Gen 3 Arco includes threaded guides or guide walls within the enclosure for correctly positioning solenoid components within the enclosure. The enclosure of the Gen 3 Arco further includes a raised valve seat, ledge, and/or O-ring to stop the component at the correct position within the enclosure.
	Enclosure Guides (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen X air controller include a plurality of guides and stops disposed within the enclosure for correctly positioning solenoid components within the enclosureand a raised valve seat, ledge, and/or O-ring to stop the solenoid component(s) at the correct position within the enclosure.
	Enclosure
	Stops Guides
	(Photograph of Gen X)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen 3 Koge air controller include a plurality of guides and stops disposed within the enclosure for correctly positioning components within the enclosure. Specifically, the enclosure of the Gen 3 Koge includes guiding walls within the enclosure for correctly positioning components within the enclosure. The solenoid component extends into the enclosure until it intersects with a stop, i.e., a raised fitting, valve seat, or ledge, etc. within the enclosure to create a seal.
	Solenoid Component Location of Stop Guide
	(Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS The guiding wall guide and raised ledge stop can be further seen in the photograph below of a cross section of the enclosure of the enclosure assembly. Guide Stop Even under Defendants' constructions from the ITC proceeding, where a "guide" would be construed as "structures formed on the inner surface of the bottom of the enclosure to laterally position internal components," and a "stop" would be construed as "structures formed on the inner surface of the

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	bottom of the enclosure to limit the travel of internal components," ANM's Gen 3 or Gen X air controllers meet this claim limitation.
	The enclosure of the Gen 3 Arco includes threaded guides to laterally position internal solenoid components. The enclosure of the Gen 3 Arco further includes a raised valve seat, ledge, and/or Oring to limit travel of solenoid components. The enclosure further includes a plastic structure formed on the inner surface of the bottom of the enclosure to limit travel of internal components.
	Stops in the enclosure (Photograph of Gen 3 Arco)
	The enclosure of the Gen X includes threaded guides to laterally position internal solenoid components. The enclosure of the Gen X further includes a raised valve seat, ledge, and/or O-ring to

CLAIM ELEMENT	Infringement Contentions
	limit travel of solenoid components. The enclosure further includes a plastic structure formed on the inner surface of the bottom of the enclosure to limit travel of internal components. Enclosure Guides in the enclosure Bottom of the Enclosure (Photograph of Gen X) The enclosure of the Gen 3 Koge includes guiding walls to laterally position solenoid components. The solenoid component extends into the enclosure until it is stopped by a stop configured to limit travel of the solenoid.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Guiding wall structure formed on the bottom inner surface Location of stop The guiding wall guide and stop can be further seen on an inner surface of the enclosure in the photograph below, a cross section of the enclosure of the enclosure assembly.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Guide Stop Bottom of Enclosure [12.2] at least one valve operably coupled Under the plain and ordinary meaning of the claim terms in light of the specification, the Gen 3 Arco, to the enclosure being in selective fluid Gen X, and Gen 3 Koge Air Controllers include at least one valve operably coupled to the enclosure communication with the air chamber and being in selective fluid communication with the air chamber and being in fluid communication with the at least one air bladder for selectively fluidly coupling the air chamber to at least one air bladder. being in fluid communication with the at least one air bladder for selectively fluidly

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
coupling the air chamber to at least one air bladder; and	The Gen 3 Arco air controllers include at least one valve operably coupled to the enclosure and capable of being in selective fluid communication with the air chamber. Specifically, the valve enclosure assembly of the Gen 3 Arco includes a plurality of valves operably coupled to the enclosure. The valves are capable of being in fluid communication with the at least one air bladder and are selectable or in selective fluid communication with the air chamber. The valves are configured to be selectable/are capable of the selective fluid coupling of the air chamber to at least one air bladder. The valve is created by a valve seat and the plunger of a solenoid. The valve seat is part of the mold that creates the enclosure of the valve enclosure assembly and is therefore operably coupled to the enclosure. The plunger of the solenoid is inserted into the enclosure such that the plunger is capable of contacting the valve seat to close the valve, and is thus also operably coupled to the enclosure. Valve Seat Valve Seat
	(Photograph of Gen 3 Arco's valve enclosure assembly with a solenoid removed)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

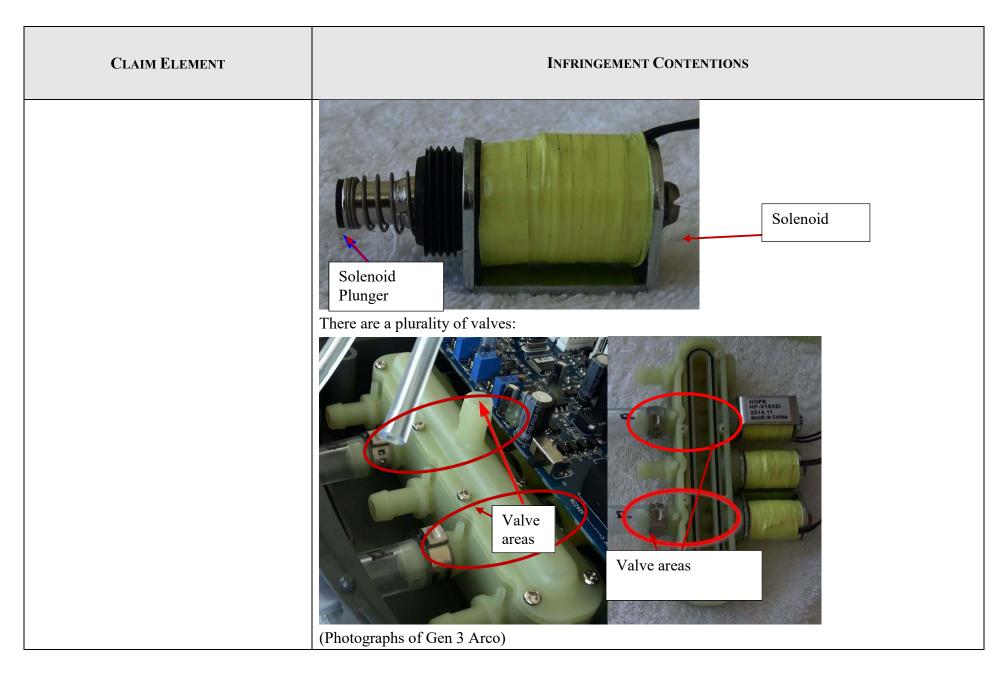


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contention	ONS
	The valve is fluidly coupled to the bladder of an air inflatable mattress. For example, as seen in the photographs below, tubing fluidly couples the enclosure of the valve enclosure assembly to one or more bladders. Accordingly, the valve is capable of being in fluid communication with the at least one air bladder.	
	Tubing fluidly connecting valve of the valve enclosure assembly to bladder Air C	hamber hiore and his high and
	Enclosure of Valve Enclosure Assembly (Photographs of Gen 3 Arco)	Enclosure of Valve Enclosure Assembly (cover removed)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	Bladder of an air inflatable mattress Tubing fluidly connecting valve enclosure assembly to bladder	

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

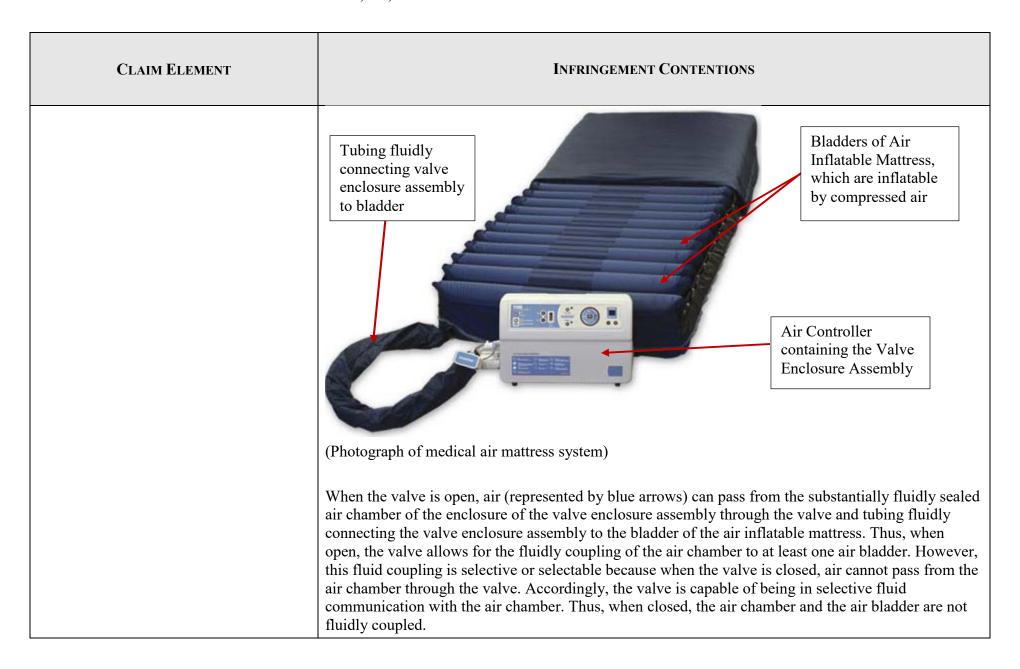
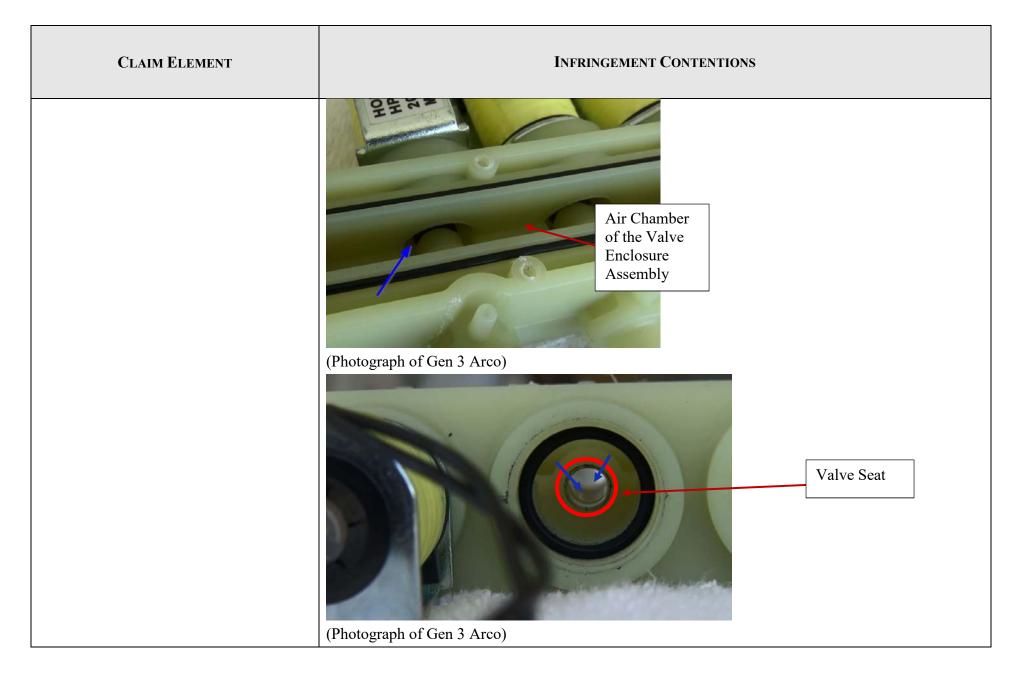


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



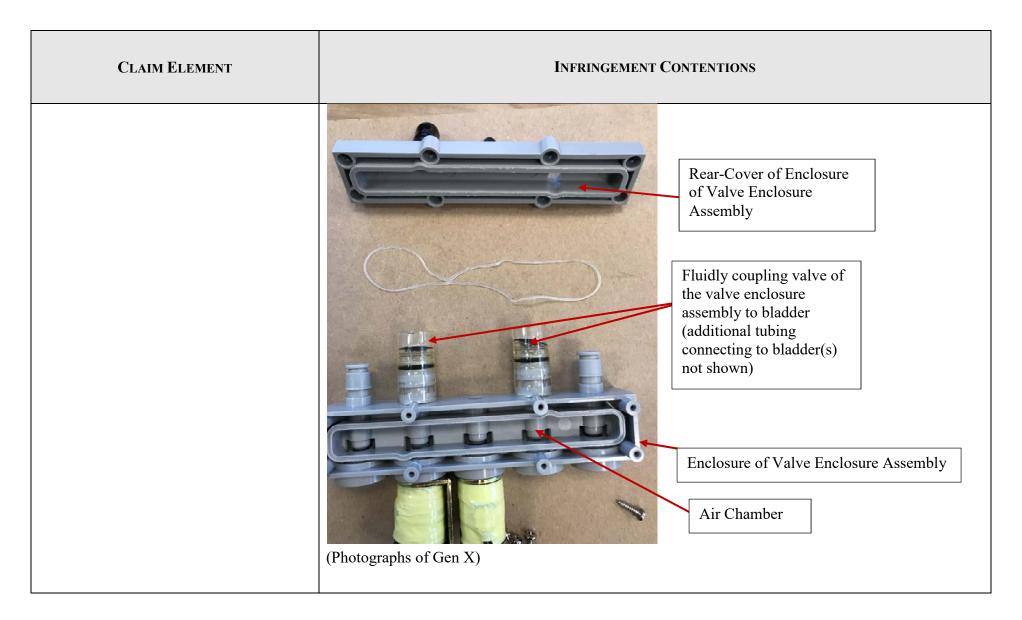
CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen X air controller include at least one valve operably coupled to the enclosure and capable of being in selective fluid communication with the air chamber. Specifically, the valve enclosure assembly of the Gen X includes a plurality of valves operably coupled to the enclosure. The valves are capable of being in fluid communication with the at least one air bladder and are selectable or in selective fluid communication with the air chamber. The valves are configured to be selectable/are capable of the selective fluid coupling of the air chamber to at least one air bladder. The valve is created by a valve seat and the plunger of a solenoid. The valve seat is part of the mold that creates the enclosure of the valve enclosure assembly and is therefore operably coupled to the enclosure. The plunger of the solenoid is inserted into the enclosure such that the plunger is capable of contacting the valve seat to close the valve, and is thus also operably coupled to the enclosure.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Valve Seat Solenoid (Photograph of Gen X's valve enclosure assembly with a solenoid removed)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Solenoid Solenoid Plunger (Photographs of Gen X) There are a plurality of valves:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Valve areas (Photographs of Gen X) The valve is fluidly coupled to the bladder of an air inflatable mattress. For example, as seen in the photographs below, tubing fluidly couples the enclosure of the valve enclosure assembly to one or more bladders. Accordingly, the valve is capable of being in fluid communication with the at least one air bladder.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



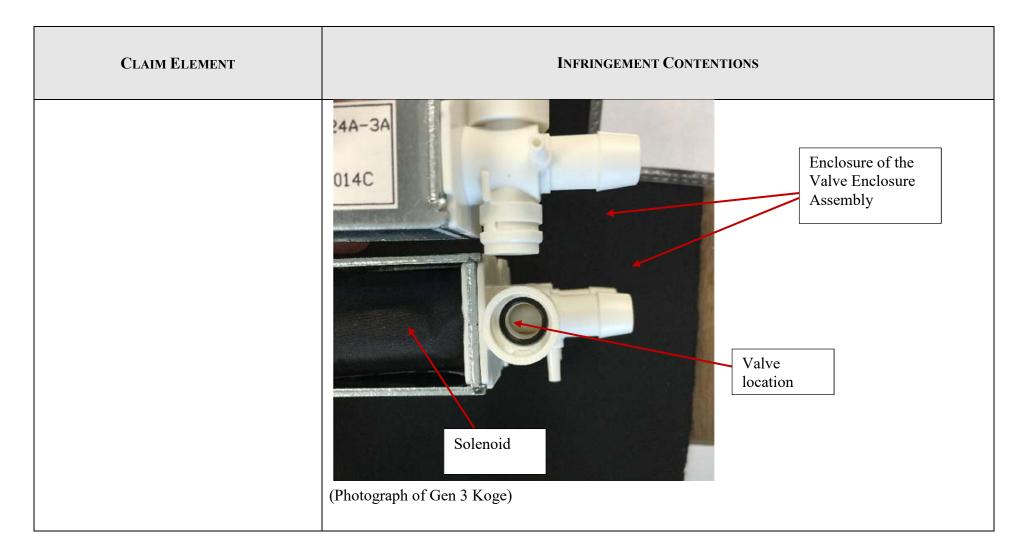
CLAIM ELEMENT INFRINGEMENT CONTENTIONS Bladder of an air inflatable mattress Tubing fluidly connecting valve enclosure assembly to bladder (exemplary photo of air mattress system) When the valve is open, air (represented by blue arrows) can pass from the substantially fluidly sealed air chamber of the enclosure of the valve enclosure assembly through the valve and tubing fluidly connecting the valve enclosure assembly to the bladder of the air inflatable mattress. Thus, when open, the valve allows for the fluidly coupling of the air chamber to at least one air bladder. However, this fluid coupling is selective or selectable because when the valve is closed, air cannot pass from the air chamber through the valve. Accordingly, the valve is capable of being in selective fluid communication with the air chamber. Thus, when closed, the air chamber and the air bladder are not fluidly coupled.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Air Chamber of the Valve Enclosure Assembly (Photograph of Gen X)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS ALL D Valve Seat (Photograph of Gen X) The Accused Products having a Gen 3 Koge air controller include at least one valve operably coupled to the enclosure and capable of being in selective fluid communication with the air chamber. Specifically, the enclosure of the valve enclosure assembly of the Gen 3 Koge includes a plurality of valves operably coupled to the enclosure. The valves are capable of being in fluid communication with the at least one air bladder and in selective or selectable fluid communication with the air chamber.

CLAIM ELEMENT	Infringement Contentions
	The enclosure of the valve enclosure assembly of the Gen 3 Koge includes a plurality of valves fluidly connected to the bladder. The photograph below shows a valve in that is partially contained within the enclosure of the valve enclosure assembly of the Gen 3 by Koge device. That is, when the modular valve enclosure assembly elements are connected, the valve is, at least partially, contained within the substantially fluidly sealed air chamber of the enclosure of the valve enclosure assembly. The valves allow for, are configured to, or are capable of the selective or selectable fluid coupling of the air chamber to at least one air bladder. The valve is created by a valve seat formed from the mold of the enclosure of the valve enclosure assembly and the plunger of a solenoid, which is inserted into the enclosure.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Valve Seat of Valve (Photograph of Gen 3 Koge) The solenoid is seen in a partially deconstructed state below. The solenoid includes a solenoid plunger within the enclosure that is capable of connecting or coupling to the valve seat.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Solenoid (Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Solenoid Plunger Enclosure (Photograph of Gen 3 Koge) The valve is fluidly coupled to the bladder of an air inflatable mattress. For example, as seen in the photographs below, tubing fluidly couples the valve enclosure assembly to one or more bladders.

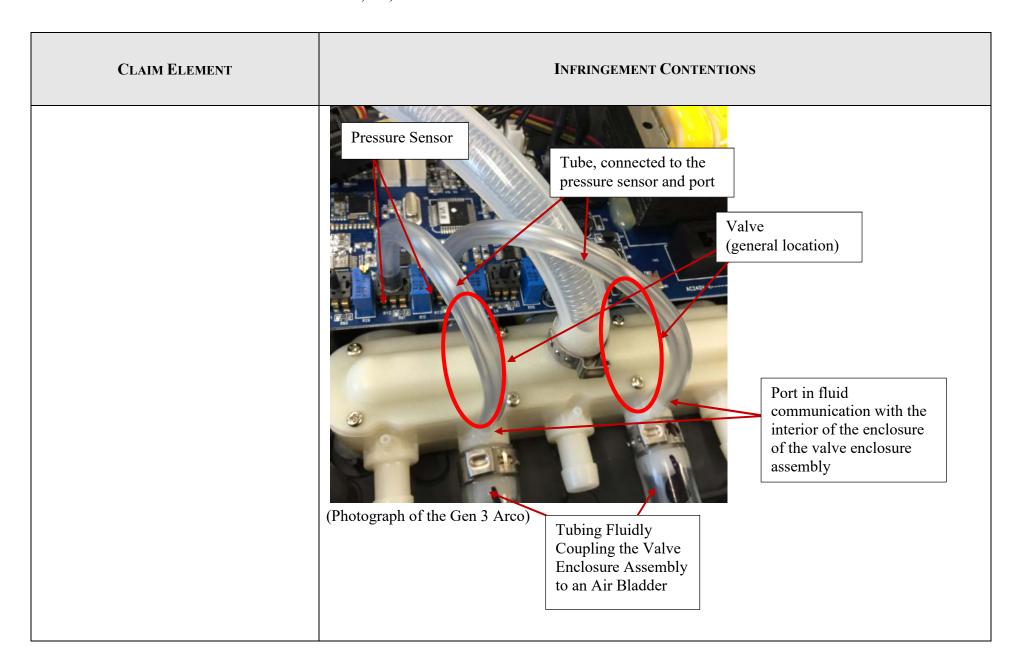
CLAIM ELEMENT INFRINGEMENT CONTENTIONS Valve OGE 160108C Enclosure of Valve **Enclosure Assembly** Tubing fluidly connecting valve enclosure assembly to air bladder(s) (Photographs of Gen 3 Koge) When the valve is open, air can pass from the substantially fluidly sealed air chamber of the valve enclosure assembly through the valve and through the tubing fluidly connecting the valve enclosure assembly to the bladder of the air inflatable mattress. Thus, when open, the valve allows for the fluidly coupling of the air chamber to at least one air bladder. However, this fluid coupling is selective or selectable because when the valve is closed, air cannot pass from the air chamber through the valve.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Accordingly, the valve is capable of being in selective fluid communication with the air chamber. Thus, when closed, the air chamber and the air bladder are not fluidly coupled.
[12.3] pressure monitor means being operably coupled to the processor and being in fluid communication with the at least one valve for monitoring the pressure in the at least one bladder.	The "pressure monitor means" is a means-plus-function limitation subject to pre-AIA 35 U.S.C. § 112, ¶ 6. The function is monitoring the pressure in the at least one bladder. The structure is a port fluidly coupled to the interior of the valve enclosure assembly that is designed to receive a tube, a pressure sensor, and a tube connected to the port and to the pressure sensor, and equivalents thereof. Under this construction, and where the other claim terms are given their plan and ordinary meaning in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge Air Controllers include a pressure monitor means being operably coupled to the processor and being in fluid communication with the at least one valve for monitoring the pressure in the at least one bladder. The Accused Products having a Gen 3 Arco air controller include pressure monitor means operably coupled to the processor. Specifically, the valve enclosure assembly of the Gen 3 Arco includes a pressure monitoring port, which is capable of being in fluid communication with the interior of the enclosure of the valve enclosure assembly.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Arco: Inlet Port in fluid communication with the interior of the enclosure of the valve enclosure assembly (Photograph of Gen 3 Arco) As seen, a tube is connected to the pressure monitoring port. The tube is also connected to a pressure sensor. In addition, and as discussed above, the pressure in the one or more air bladders is conveyed to the enclosure of the valve enclosure assembly via the tubing that fluidly couples the valve enclosure assembly to the air bladder(s). The pressure monitoring port is located between the valve(s) and the air bladder(s).

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT Infringement Contentions The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor. Circuit Board of Processor Pressure Sensor (Photograph of Gen 3 Arco) The pressure monitor means is capable of being in fluid communication with the at least one valve for continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure sensor(s) to the pressure monitoring port(s) of the valve enclosure assembly, the pressure sensor is capable of being in fluid communication with the enclosure of the valve enclosure assembly. Because the valve is located just upstream of the pressure monitoring port, the valve and the pressure monitoring port are in fluid communication. Accordingly, the pressure sensor is capable of being in fluid communication with the valve. Tubing fluidly couples the valve enclosure assembly to the air bladder(s), the valve, pressure monitoring port, and air bladder(s) are capable of being in fluid

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	communication with each other. The pressure sensor and the processor of the press is therefore able to or capable of continuously monitoring the pressure in the air bla monitoring the pressure conveyed from the pressure monitoring port.	
	The Accused Products having a Gen X air controller include pressure monitor mean coupled to the processor. Specifically, the valve enclosure assembly of the Gen X is monitoring port, which is capable of being in fluid communication with the interior the valve enclosure assembly.	ncludes a pressure
	Gen X: Air Inlet	
	Enclosure of enclosure ass	
	Port in fluid communication with the interior of the enclosure of the valve enclosure assembly	
	(Photograph of Gen X)	

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT		Infringement Contentions	
	as discussed above, the pressure valve enclosure assembly via the	interior of of the values assembly	the enclosure of the assembly to the air air bladder(s). Valve (general location)
	(Photograph of the Gen X)	Fluidly couples the enclosure of the Valve Enclosure Assembly to an Air Bladder	

CLAIM ELEMENT INFRINGEMENT CONTENTIONS The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor. Pressure Sensor Circuit Board of Processor (Photograph of Gen X) The pressure monitor means is capable of being in fluid communication with the at least one valve for continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure sensor(s) to the pressure monitoring port(s) of the valve enclosure assembly, the pressure sensor is

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	capable of being in fluid communication with the enclosure of the valve enclosure assembly. Because the valve is located just upstream of the pressure monitoring port, the valve and the pressure monitoring port are in fluid communication. Accordingly, the pressure sensor is capable of being in fluid communication with the valve. Tubing fluidly couples the valve enclosure assembly to the air bladder(s), the valve, pressure monitoring port, and air bladder(s) are capable of being in fluid communication with each other. The pressure sensor and the processor of the pressure monitor means is therefore able to or capable of continuously monitoring the pressure in the air bladder(s) by monitoring the pressure conveyed from the pressure monitoring port.
	The Accused Products having a Gen 3 Koge air controller include pressure monitor means operably coupled to the processor. Specifically, the enclosure of the valve enclosure assembly of the Gen 3 Koge includes a pressure monitoring port, which is capable of being in fluid communication with the interior of the enclosure of the valve enclosure assembly.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS 8 Port in fluid communication with the interior of the enclosure of the valve enclosure assembly (Photograph of Gen 3 Koge) As seen in the photograph above, a tube is connected to the pressure monitoring port. The tube is also connected to a pressure sensor. In addition, and as discussed above, the valve is capable of being in fluid communication with the one or more air bladders via tubing that fluidly couples the two

components. The valve is also just upstream of the pressure monitoring port, and is therefore capable of being in fluid communication with the pressure monitoring port. Accordingly, when the pressure

CLAIM ELEMENT INFRINGEMENT CONTENTIONS from the pressure monitoring port is conveyed to the pressure sensor from the enclosure of the valve enclosure assembly via the tubing connected to the pressure monitoring port and pressure sensor, the pressure monitor means can monitor the pressure in the at least one bladder. Pressure Sensor Tube, connected to the pressure sensor and the port Port in fluid **Tubing Fluidly** communication with the Coupling the interior of the enclosure Valve of the valve enclosure Enclosure assembly Assembly to an Air Bladder (Photograph of the Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor. Pressure Sensor Circuit Board of Processor (Photograph of Gen 3 Koge)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

Infringement Contentions
Versions 1.8, 1.9, 1.92, 1.97, and 2.0 of the source code further demonstrate that Gen 3 Accused Products' processors are configured to monitor and do monitor, or are capable of monitoring, the pressure detected by the pressure sensor(s).

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

201

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

CLAIM ELEMENT	Infringement Contentions
	This limitation may further implicate other electronics, software, firmware, and/or source code of the Accused Products. Additional Source Code for the Accused Products may further show how this claim limitation is met. To resolve a dispute regarding Plaintiff's Notice of Inspection for Source Code, the parties have agreed that Plaintiff shall be allowed to inspect remaining Source Code for the Accused Products on mutually agreeable date(s), after which Plaintiff shall supplement its infringement contentions, pursuant to an agreed-upon timeline and without opposition, using the information learned during the inspection.
Claim 16	
[16.P] An improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air, a pump fluidly coupled to the at least one air bladder for providing compressed air thereto, and a	The preamble of claim 16 is limiting and under the plain and ordinary meaning of these claim terms in light of the specification, each claim limitation is met by ANM's Accused Products. Specifically, the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air, a pump fluidly coupled to the at least one air bladder for providing compressed air thereto, and a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle, the

CLAIM ELEMENT

improved valve enclosure assembly being fluidly coupled intermediate the pump and

the at least one air bladder for controlling

the inflation of the at least one air bladder.

improved valve enclosure assembly

during an inflate/deflate cycle, the

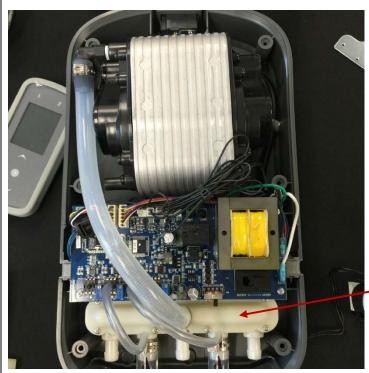
comprising:

processor for providing commands to the

improved valve enclosure assembly being fluidly coupled intermediate the pump and the at least one air bladder for controlling the inflation of the at least one air bladder.

INFRINGEMENT CONTENTIONS

The Accused Products having a Gen 3 Arco air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed



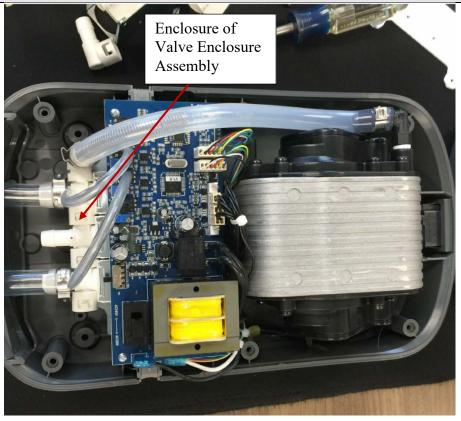
Enclosure of Valve Enclosure Assembly

(Photograph of Gen 3 Arco)

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen X air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:
	Enclosure of Valve Enclosure Assembly
	(Photograph of Gen X)
	The Accused Products having a Gen 3 Koge air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:

CLAIM ELEMENT

INFRINGEMENT CONTENTIONS



(Photograph of Gen 3 Koge)

The valve enclosure assemblies of the Gen 3 Arco, Gen X, and Gen 3 Koge are used with an air inflatable mattress having at least one air bladder inflated by compressed air. Non-limiting examples of said use is shown in the photographs below.

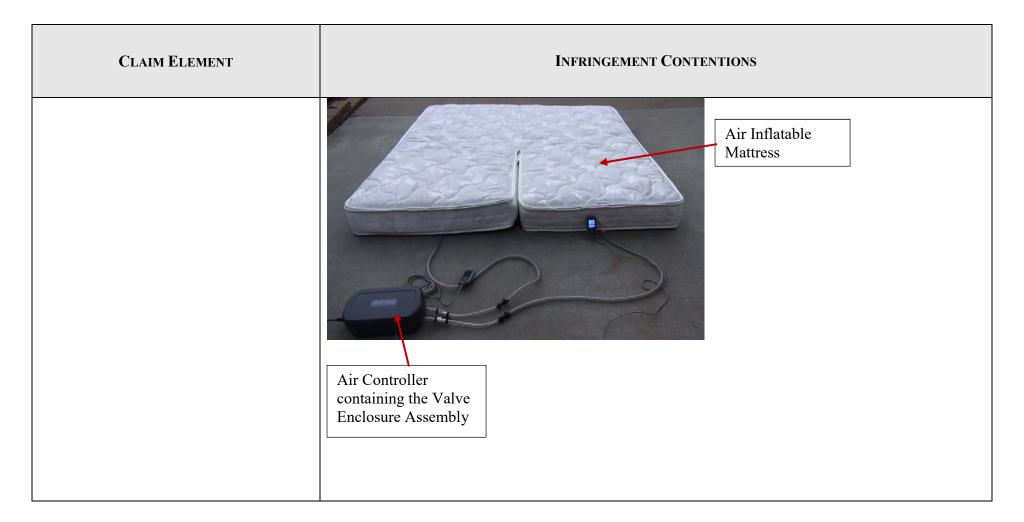
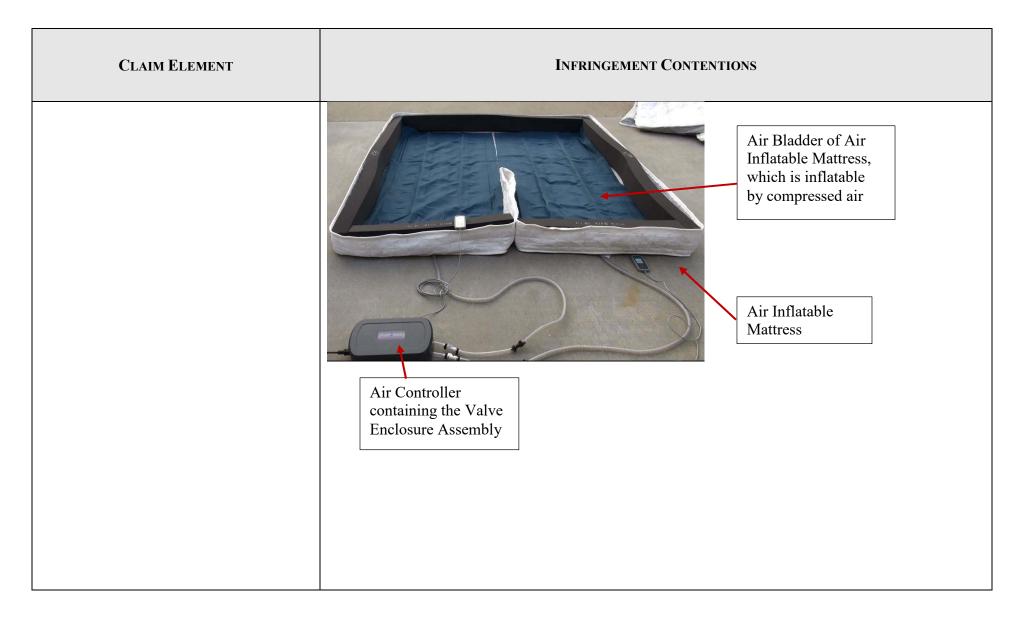


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Air Bladder of Air Inflatable Mattress, inflated by compressed air Air Bladder of Air Inflatable Mattress, deflated Air Bladder of Air Inflatable Mattress, which is inflatable by compressed air

210

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

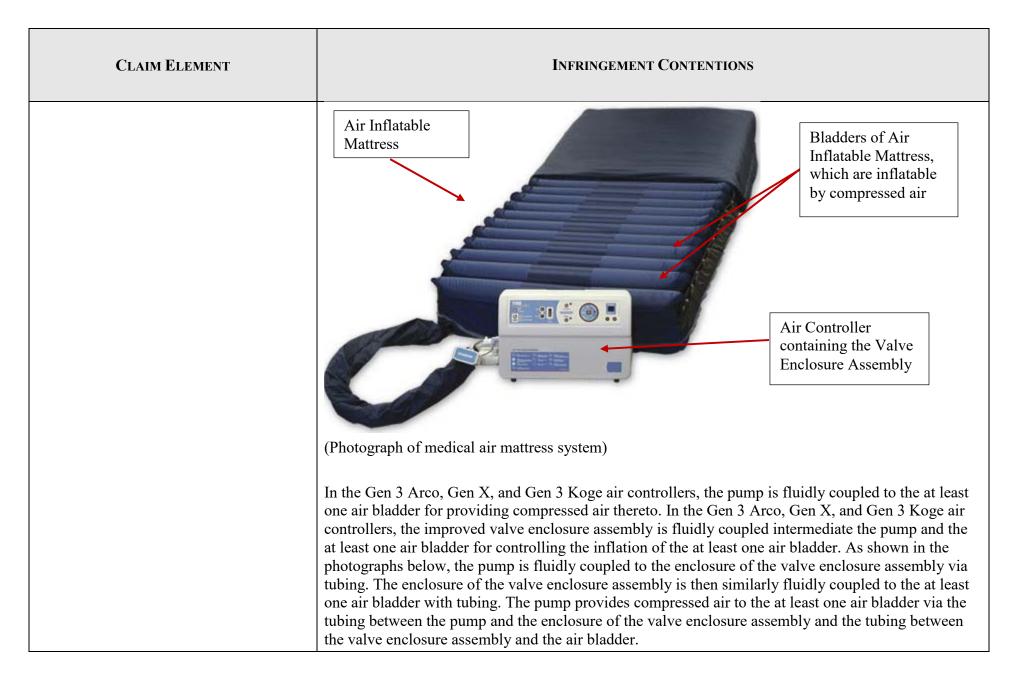


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Pump Tubing Fluidly Coupling the Pump to the Valve Enclosure Assembly Enclosure of Valve Enclosure Assembly Tubing Fluidly Coupling the Pump to the Valve Enclosure Assembly Pump Tubing Fluidly Coupling the Enclosure Assembly (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	Pum Valv	Pump ing Fluidly Coupling the property to the Enclosure of the Enclosure Assembly Enclosure of Valve Enclosure Assembly aidly Couples the closure of Valve Closure Assembly to Air Bladder

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Gen 3 Koge: Tubing Fluidly Coupling the Pump to the Enclosure of Valve Enclosure Assembly Pump Enclosure of Valve Enclosure of Valve Enclosure Assembly Coupling the Enclosure Assembly to an Air Bladder (Photograph of Gen 3 Koge)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As shown in the example of a Gen 3 air controller being used with an inflatable air matress, the two tubes that fluidly couple to the valve enclosure assembly fluidly couple to the air bladders of the inflatable air matress. Because the pump is fluidly coupled to the air bladder, the air bladders inflate using the compressed air from the pump.
	Air Bladders of Air Inflatable Mattress, which are inflated using compressed air
	Tubing Fluidly Coupling the Valve Enclosure Assembly to an Air Bladder
	Air Controller containing the Valve Enclosure Assembly
	In the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers, a processor provides commands to the improved valve enclosure assembly during an inflate/deflate cycle:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Arco: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Arco)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen X: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen X)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Koge: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Koge) Versions 1.8, 1.9, 1.92, 1.97, and 2.0 of ANM's source code further demonstrate that the Gen 3 Accused Products include a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	This limitation may further implicate other electronics, software, firmware, and/or source code of the Accused Products. Additional Source Code for the Accused Products may further show how this claim limitation is met. To resolve a dispute regarding Plaintiff's Notice of Inspection for Source Code, the parties have agreed that Plaintiff shall be allowed to inspect remaining Source Code for the Accused Products on mutually agreeable date(s), after which Plaintiff shall supplement its infringement contentions, pursuant to an agreed-upon timeline and without opposition, using the information learned during the inspection. Even under Defendants' construction from the ITC proceeding, where a "valve enclosure assembly"
	means "an enclosure and a rear cover defining an internal, pressurized air chamber enclosing a valve," ANM's Gen 3 or Gen X air controllers meet this claim limitation.
	As seen in the photographs below, the enclosure of the Gen 3 Arco's valve enclosure assembly is comprised of an enclosure and a rear cover.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infr	INGEMENT CONTENTIONS
	t l	Enclosure of the Valve Enclosure Assembly
	Enclosure	Enclosure with Rear Cover Removed
	(Photograph of the Gen 3 Arco)	
	Furthermore, as seen in the photograph b enclosure, the Gen 3 Arco the internal ch	elow showing a side perspective view of the Gen 3 Arco's amber is shown enclosing a valve.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Perspective view of the internal chamber enclosing a valve
	(Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS As seen in the photographs below, the enclosure of the Gen X's valve enclosure assembly is comprised of an enclosure and a rear cover. Rear Cover of the Valve **Enclosure Assembly** Internal air chamber Enclosure of the Valve Enclosure Assembly (Photograph of the Gen 3 Arco) Furthermore, as seen in the photograph below showing a side perspective view of the Gen 3 Arco's enclosure, the Gen 3 Arco the internal chamber is shown enclosing a valve.

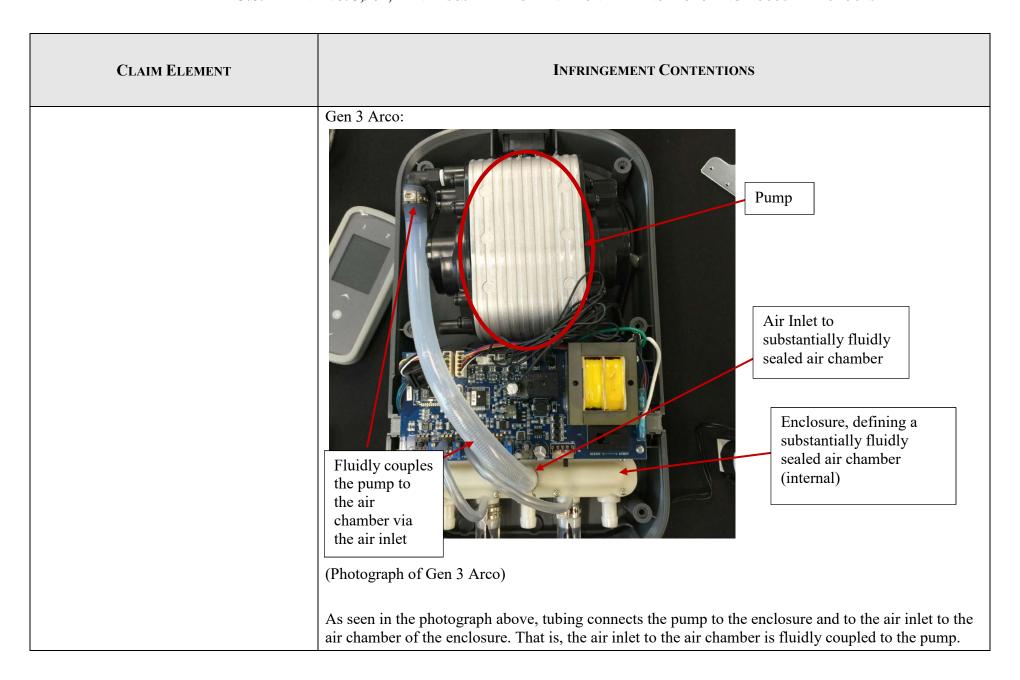
CLAIM ELEMENT INFRINGEMENT CONTENTIONS Internal Chamber Enclosing a Valve (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As seen in the photographs below, the enclosure of the Gen 3 Koge's valve enclosure assembly is comprised of an enclosure and a rear cover. The valve seal is contained within the enclosure, which shows how the enclosure and rear cover define an internal air chamber enclosing a valve.
	Rear Cover of the Valve Enclosure Assembly Internal air chamber enclosing a valve Enclosure of the Valve Enclosure Assembly
	Enclosure Enclosure with Rear Cover Removed
	(Photograph of the Gen 3 Koge)

CLAIM ELEMENT	Infringement Contentions
[16.1] an enclosure defining a substantially fluidly sealed air chamber and having at least one air inlet to the air chamber being fluidly coupled to the pump, the enclosure being formed of an enclosure portion and a rear cover portion, a flexible seal being compressively interposed between the enclosure portion and a rear cover portion to effect a substantially fluid tight seal therebetween;	Under the plain and ordinary meaning of the claim terms in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers include an enclosure defining a substantially fluidly sealed air chamber and having at least one air inlet to the air chamber being fluidly coupled to the pump, the enclosure being formed of an enclosure portion and a rear cover portion, a flexible seal being compressively interposed between the enclosure portion and a rear cover portion to effect a substantially fluid tight seal therebetween. The Accused Products having a Gen 3 Arco air controller include a valve enclosure assembly comprised, in part, of an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber and which is fluidly coupled to the pump.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure, which defines a Substantially Fluidly Sealed Air Chamber (Photograph of Gen 3 Arco)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Inlet (Photograph of Gen 3 Arco) As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more O-rings, which assist in substantially fluidly sealing the air chamber.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in substantially fluidly sealing the air chamber Air Chamber (Photograph of Gen 3 Arco's enclosure (depicted with the rear-cover removed for illustrative purposes).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in substantially fluidly sealing the air chamber Part of enclosure defining a substantially fluidly sealed air chamber (Photograph of Gen 3 Arco's enclosure (depicted with solenoids removed).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen X air controller include a valve enclosure assembly comprised, in part, of an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber and which is fluidly coupled to the pump.
	Fluidly couples pump to the air chamber via the air inlet (Photograph of Gen X)

CLAIM ELEMENT	Infringement Contentions
	As seen in the photograph above, tubing connects the pump to the enclosure and to the air inlet to the air chamber of the enclosure. That is, the air inlet to the air chamber is fluidly coupled to the pump. Air inlet to substantially fluidly sealed air chamber of the enclosure (Photograph of Gen X) As further seen from the photographs below, the enclosure defines an air chamber. The air chamber
	includes one or more O-rings, which assist in substantially fluidly sealing the air chamber.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in Substantially Fluidly Sealing the Air Chamber (Photograph of Gen X's enclosure (depicted with the rear-cover and O-ring disassembled for illustrative purposes)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in Substantially Fluidly Sealing the Air Chamber Part of enclosure defining a Substantially Fluidly Sealed Air Chamber (Photograph of Gen X's enclosure (depicted with a solenoid removed).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen 3 Koge air controller include an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber, which is fluidly coupled to the pump.
	Gen 3 Koge: Air Inlet to Substantially Fluidly Sealed Air Chamber Tubing that fluidly couples the pump to the air chamber via the air inlet Pump Enclosure, Defining a Substantially Fluidly Sealed Air Chamber
	(Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS As seen in the photograph above, tubing connects the pump to the enclosure and to the air inlet to the air chamber of the enclosure. That is, the air inlet to the air chamber is fluidly coupled to the pump. Enclosure, which defines a Substantially Fluidly Sealed Air Chamber Inlet to substantially fluidly sealed enclosure (Photograph of Gen 3 Koge) As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more interlocking connectors, which assist in substantially fluidly sealing the air chamber.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure defining a substantially fluidly sealed air chamber (Photograph of Gen 3 Koge)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Substantially Fluidly Sealed Air Chamber Enclosure (Photograph of Gen 3 Koge's enclosure (depicted detached from other enclosure components).) When the Gen 3 and Gen X air controllers inflate the one or more air bladders, the pump, tubing that connects the pump to the air inlet, air chamber, and tubing connecting the air chamber to the one or more air bladders creates a substantially fluidly sealed environment substantially fluidly sealing the air chamber. That is, the enclosure contains several fluid tight seals and the tubing connecting the air bladders and pump to the enclosure creates a fluidly sealed environment such that the air chamber defined by the enclosure is substantially fluidly sealed. To the extent this limitation is not literally

CLAIM ELEMENT	Infringement Contentions
	present the limitation is met under the doctrine of equivalents because the substantially fluidly sealed environment performs substantially the same function as a substantially sealed air chamber in substantially the same way and to obtain the substantially same result. Accordingly, the air chamber defined by the enclosure meets the substantially fluidly sealed limitation.
	The Accused Products having a Gen 3 Arco air controller further include an enclosure being formed of an enclosure portion and a rear cover portion, a flexible seal being compressively interposed between the enclosure portion and a rear cover portion to effect a substantially fluid tight seal therebetween.
	As seen in the photographs below, the Gen 3 Arco's enclosure of the valve enclosure assembly is comprised of an enclosure portion and a rear cover portion. Furthermore, a flexible seal is compressively interposed between the enclosure portion and the rear cover portion, thereby creating a substantially fluid tight seal between the enclosure portion and the rear cover portion.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

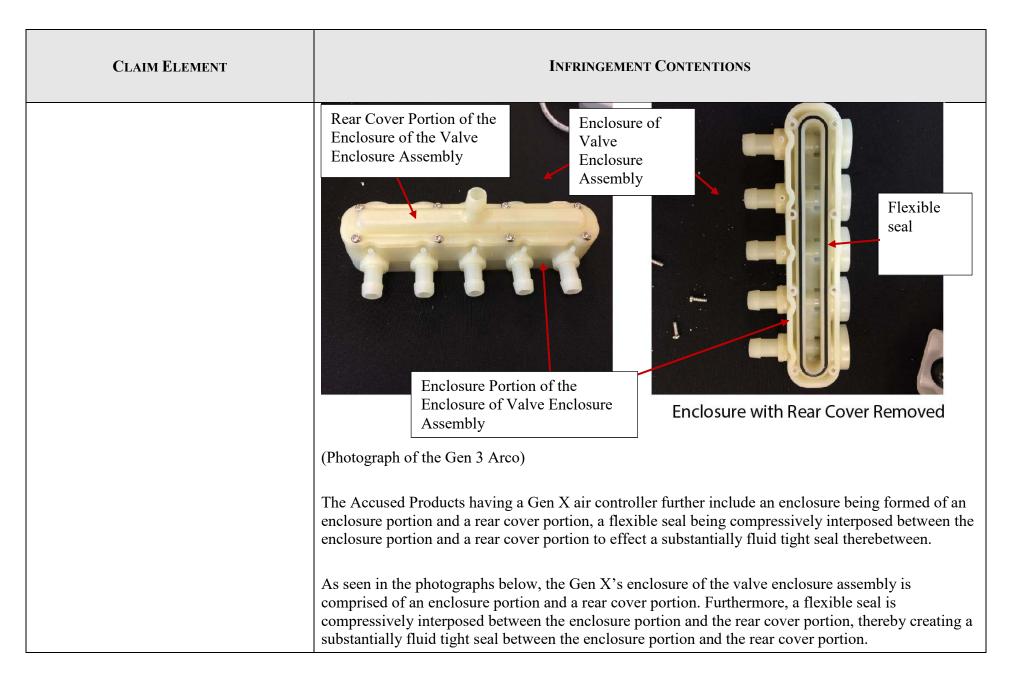
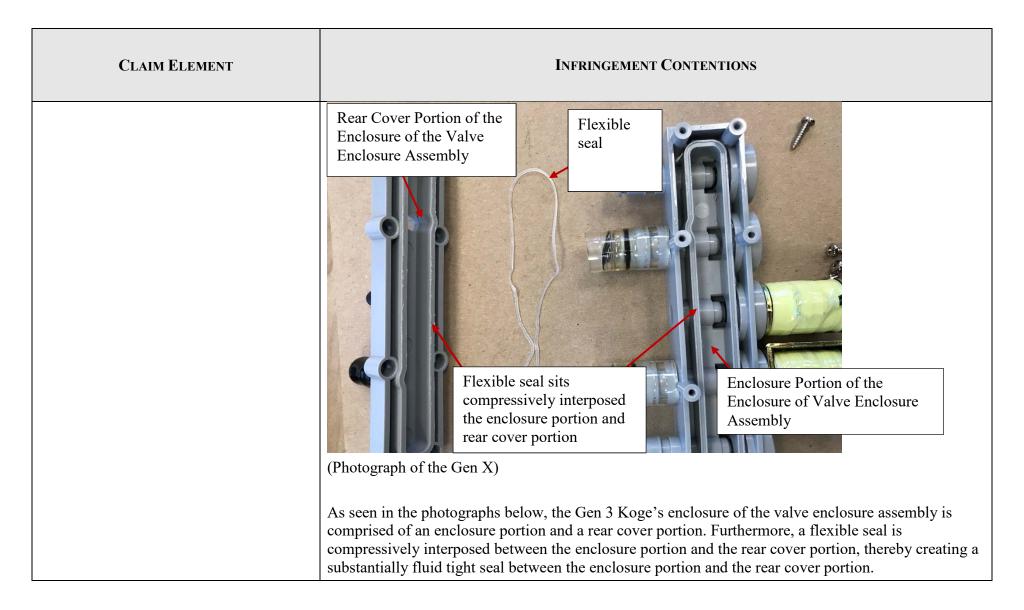


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Rear Cover Portion of Flexible Seal the Enclosure Enclosure of Valve Enclosure Assembly with Rear Cover Portion Removed Enclosure Portion of the Enclosure (Photograph of the Gen 3 Koge) [16.2] at least one valve operably coupled Under the plain and ordinary meaning of the claim terms in light of the specification, the Gen 3 Arco, to the enclosure being in selective fluid Gen X, and Gen 3 Koge Air Controllers include at least one valve operably coupled to the enclosure communication with the air chamber and being in selective fluid communication with the air chamber and being in fluid communication with the at least one air bladder for selectively fluidly coupling the air chamber to at least one air bladder. being in fluid communication with the at

CLAIM ELEMENT INFRINGEMENT CONTENTIONS The Gen 3 Arco air controllers include at least one valve operably coupled to the enclosure and least one air bladder for selectively fluidly capable of being in selective fluid communication with the air chamber. Specifically, the valve coupling the air chamber to at least one air enclosure assembly of the Gen 3 Arco includes a plurality of valves operably coupled to the enclosure. bladder; and The valves are capable of being in fluid communication with the at least one air bladder and are selectable or in selective fluid communication with the air chamber. The valves are configured to be selectable/are capable of the selective fluid coupling of the air chamber to at least one air bladder. The valve is created by a valve seat and the plunger of a solenoid. The valve seat is part of the mold that creates the enclosure of the valve enclosure assembly and is therefore operably coupled to the enclosure. The plunger of the solenoid is inserted into the enclosure such that the plunger is capable of contacting the valve seat to close the valve, and is thus also operably coupled to the enclosure. Valve Seat Solenoid (Photograph of Gen 3 Arco's valve enclosure assembly with a solenoid removed)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

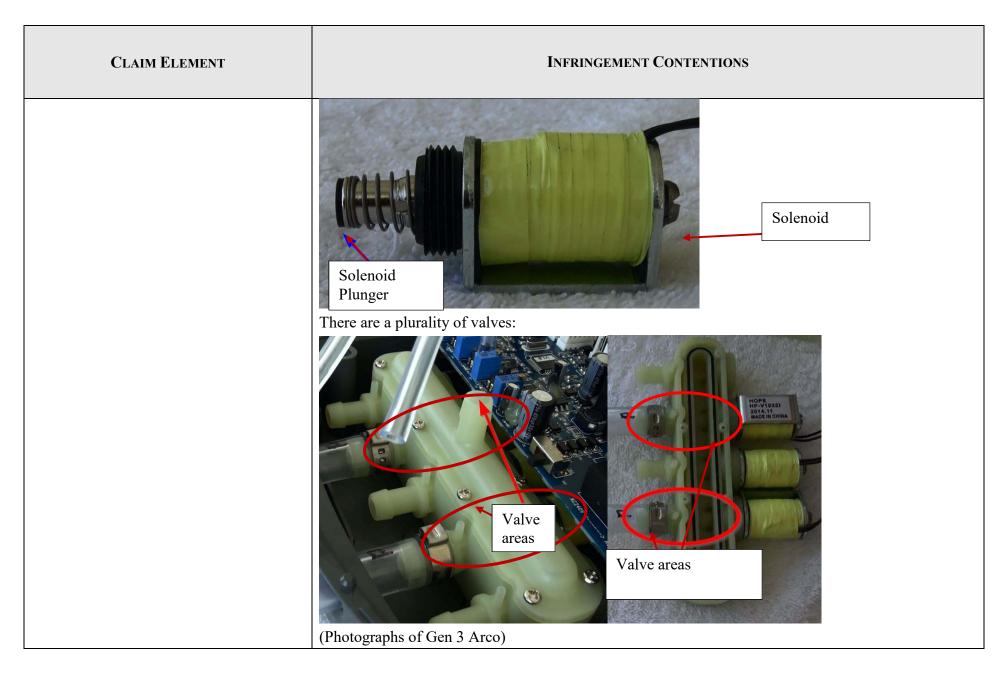


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	The valve is fluidly coupled to the bladder of an air inflatable mattress. For example, as seen in the photographs below, tubing fluidly couples the enclosure of the valve enclosure assembly to one or more bladders. Accordingly, the valve is capable of being in fluid communication with the at least one air bladder.	
	Tubing fluidly connecting valve of the valve enclosure assembly to bladder Air C	thamber than the state of the s
	Enclosure of Valve Enclosure Assembly (Photographs of Gen 3 Arco)	Enclosure of Valve Enclosure Assembly (cover removed)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	Bladder of an air inflatable mattress Tubing fluidly connecting valve enclosure assembly to bladder	

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

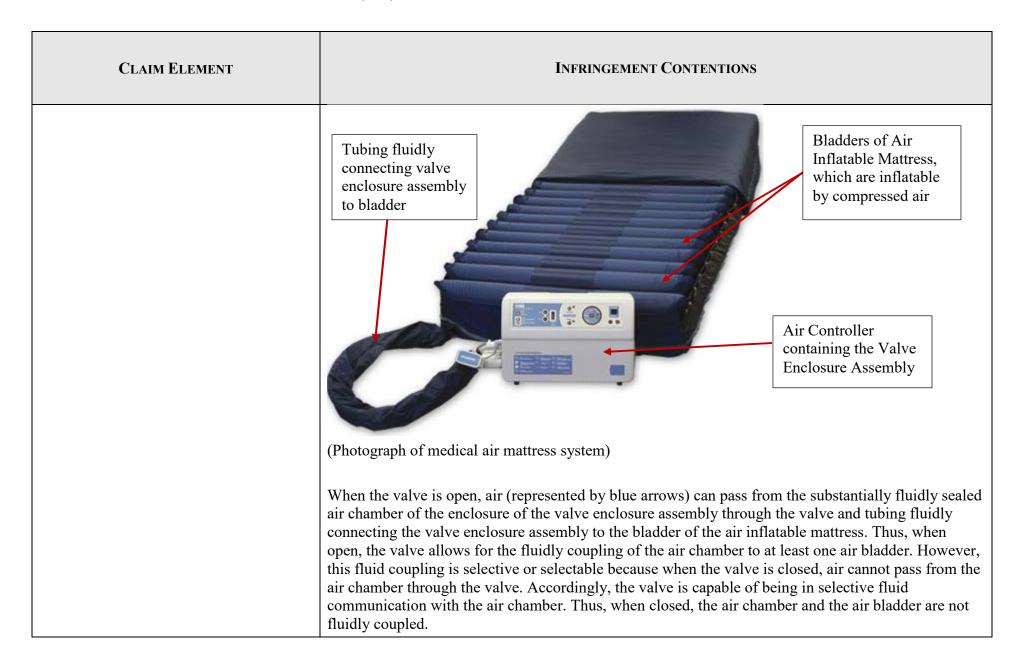
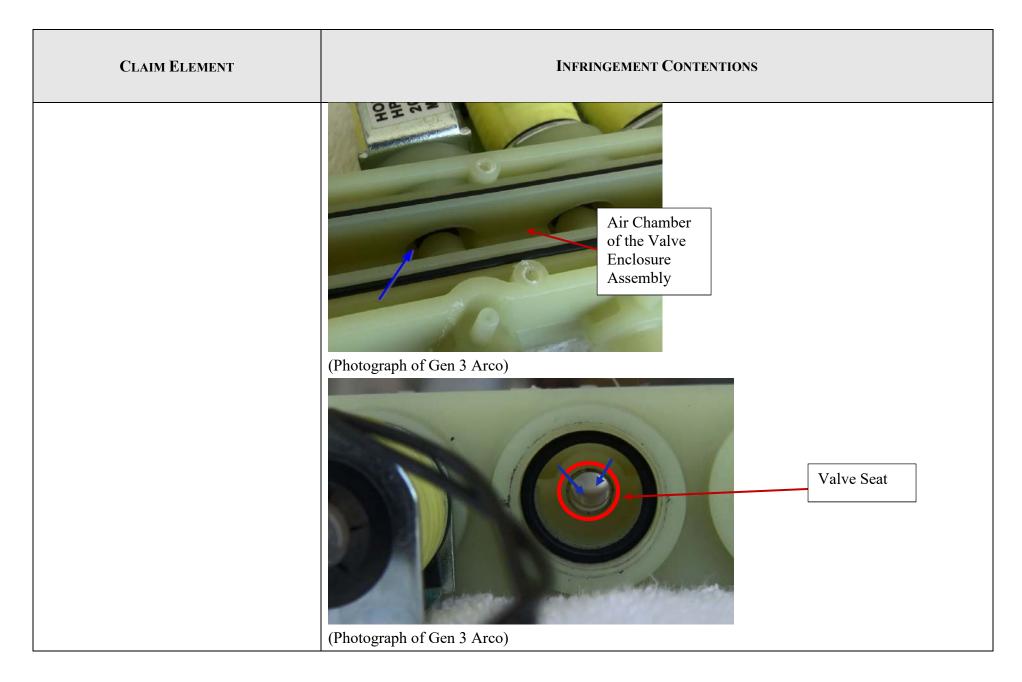


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



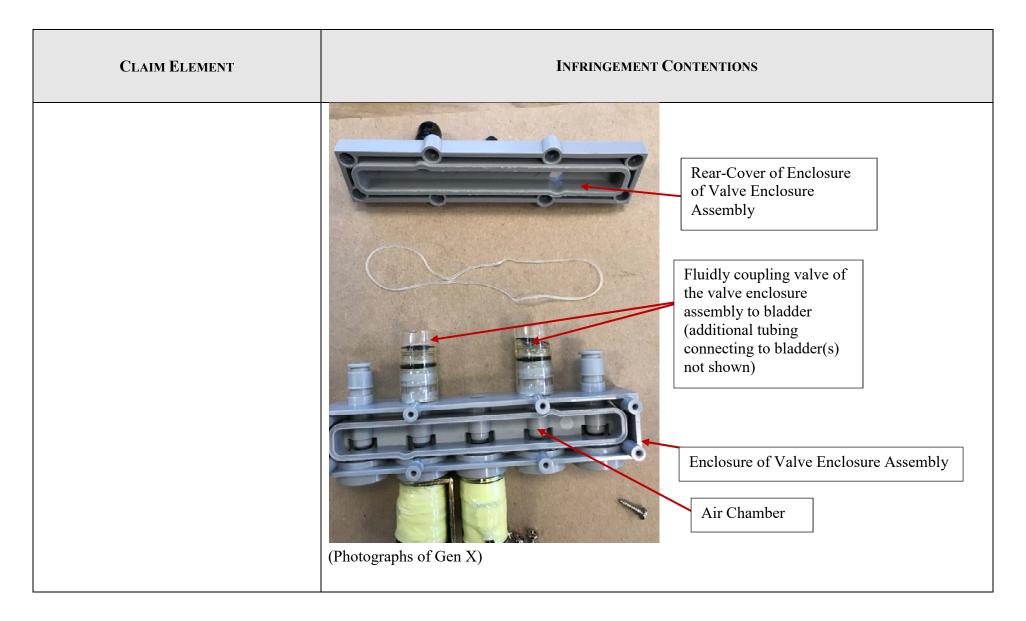
CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen X air controller include at least one valve operably coupled to the enclosure and capable of being in selective fluid communication with the air chamber. Specifically, the valve enclosure assembly of the Gen X includes a plurality of valves operably coupled to the enclosure. The valves are capable of being in fluid communication with the at least one air bladder and are selectable or in selective fluid communication with the air chamber. The valves are configured to be selectable/are capable of the selective fluid coupling of the air chamber to at least one air bladder. The valve is created by a valve seat and the plunger of a solenoid. The valve seat is part of the mold that creates the enclosure of the valve enclosure assembly and is therefore operably coupled to the enclosure. The plunger of the solenoid is inserted into the enclosure such that the plunger is capable of contacting the valve seat to close the valve, and is thus also operably coupled to the enclosure.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Valve Seat Solenoid (Photograph of Gen X's valve enclosure assembly with a solenoid removed)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Solenoid Solenoid Plunger (Photographs of Gen X)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS There are a plurality of valves: Valve areas (Photographs of Gen X) The valve is fluidly coupled to the bladder of an air inflatable mattress. For example, as seen in the photographs below, tubing fluidly couples the enclosure of the valve enclosure assembly to one or more bladders. Accordingly, the valve is capable of being in fluid communication with the at least one air bladder.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



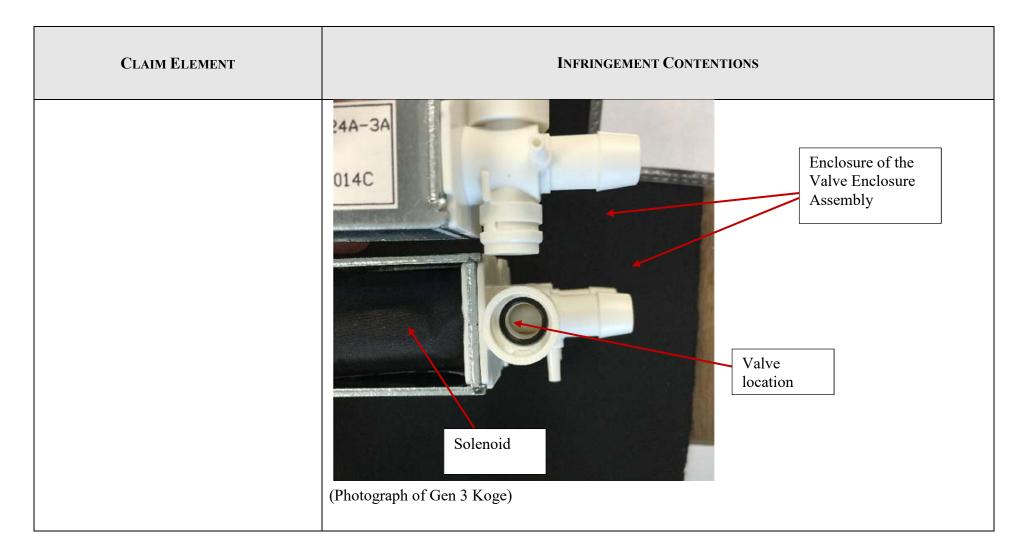
CLAIM ELEMENT INFRINGEMENT CONTENTIONS Bladder of an air inflatable mattress Tubing fluidly connecting valve enclosure assembly to bladder (exemplary photo of air mattress system) When the valve is open, air (represented by blue arrows) can pass from the substantially fluidly sealed air chamber of the enclosure of the valve enclosure assembly through the valve and tubing fluidly connecting the valve enclosure assembly to the bladder of the air inflatable mattress. Thus, when open, the valve allows for the fluidly coupling of the air chamber to at least one air bladder. However, this fluid coupling is selective or selectable because when the valve is closed, air cannot pass from the air chamber through the valve. Accordingly, the valve is capable of being in selective fluid communication with the air chamber. Thus, when closed, the air chamber and the air bladder are not fluidly coupled.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Air Chamber of the Valve Enclosure Assembly (Photograph of Gen X)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS ALL D Valve Seat (Photograph of Gen X) The Accused Products having a Gen 3 Koge air controller include at least one valve operably coupled to the enclosure and capable of being in selective fluid communication with the air chamber. Specifically, the enclosure of the valve enclosure assembly of the Gen 3 Koge includes a plurality of valves operably coupled to the enclosure. The valves are capable of being in fluid communication with the at least one air bladder and in selective or selectable fluid communication with the air chamber.

CLAIM ELEMENT	Infringement Contentions
	The enclosure of the valve enclosure assembly of the Gen 3 Koge includes a plurality of valves fluidly connected to the bladder. The photograph below shows a valve in that is partially contained within the enclosure of the valve enclosure assembly of the Gen 3 by Koge device. That is, when the modular valve enclosure assembly elements are connected, the valve is, at least partially, contained within the substantially fluidly sealed air chamber of the enclosure of the valve enclosure assembly. The valves allow for, are configured to, or are capable of the selective or selectable fluid coupling of the air chamber to at least one air bladder. The valve is created by a valve seat formed from the mold of the enclosure of the valve enclosure assembly and the plunger of a solenoid, which is inserted into the enclosure.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Valve Seat of Valve (Photograph of Gen 3 Koge) The solenoid is seen in a partially deconstructed state below. The solenoid includes a solenoid plunger within the enclosure that is capable of connecting or coupling to the valve seat.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Solenoid (Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Solenoid Plunger Enclosure (Photograph of Gen 3 Koge) The valve is fluidly coupled to the bladder of an air inflatable mattress. For example, as seen in the photographs below, tubing fluidly couples the valve enclosure assembly to one or more bladders.

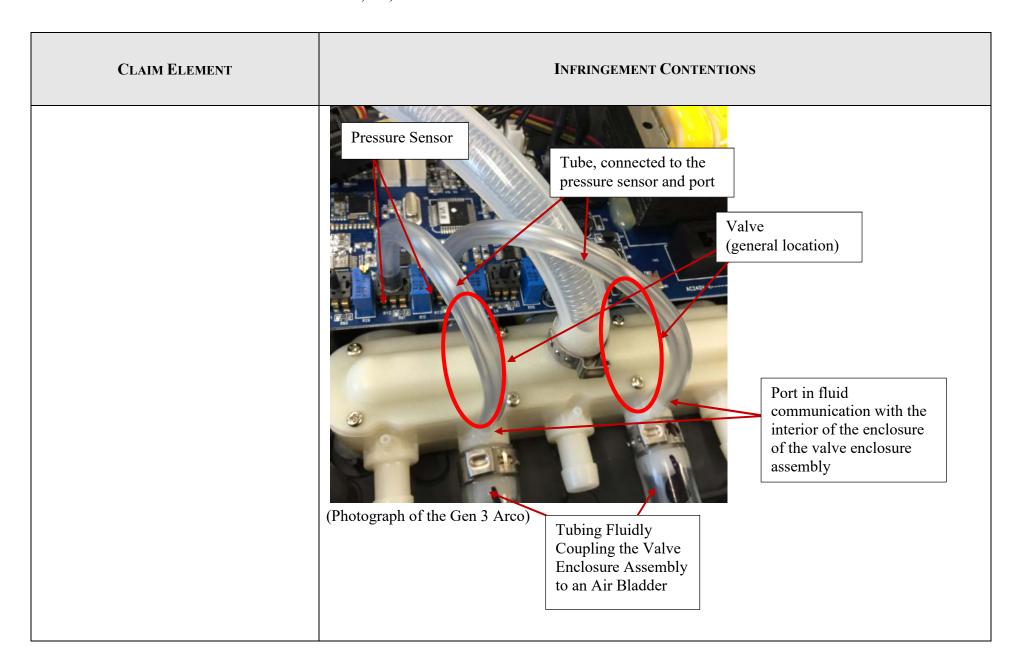
CLAIM ELEMENT INFRINGEMENT CONTENTIONS Valve OGE 160108C Enclosure of Valve **Enclosure Assembly** Tubing fluidly connecting valve enclosure assembly to air bladder(s) (Photographs of Gen 3 Koge) When the valve is open, air can pass from the substantially fluidly sealed air chamber of the valve enclosure assembly through the valve and through the tubing fluidly connecting the valve enclosure assembly to the bladder of the air inflatable mattress. Thus, when open, the valve allows for the fluidly coupling of the air chamber to at least one air bladder. However, this fluid coupling is selective or selectable because when the valve is closed, air cannot pass from the air chamber through the valve.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Accordingly, the valve is capable of being in selective fluid communication with the air chamber. Thus, when closed, the air chamber and the air bladder are not fluidly coupled.
[16.3] pressure monitor means being operably coupled to the processor and being in fluid communication with the at least one valve for monitoring the pressure in the at least one bladder.	The "pressure monitor means" is a means-plus-function limitation subject to pre-AIA 35 U.S.C. § 112, ¶ 6. The function is monitoring the pressure in the at least one bladder. The structure is a port fluidly coupled to the interior of the valve enclosure assembly that is designed to receive a tube, a pressure sensor, and a tube connected to the port and to the pressure sensor, and equivalents thereof. Under this construction, and where the other claim terms are given their plan and ordinary meaning in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge Air Controllers include a pressure monitor means being operably coupled to the processor and being in fluid communication with the at least one valve for monitoring the pressure in the at least one bladder. The Accused Products having a Gen 3 Arco air controller include pressure monitor means operably coupled to the processor. Specifically, the valve enclosure assembly of the Gen 3 Arco includes a pressure monitoring port, which is capable of being in fluid communication with the interior of the enclosure of the valve enclosure assembly.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Arco: Inlet Port in fluid communication with the interior of the enclosure of the valve enclosure assembly (Photograph of Gen 3 Arco) As seen, a tube is connected to the pressure monitoring port. The tube is also connected to a pressure sensor. In addition, and as discussed above, the pressure in the one or more air bladders is conveyed to the enclosure of the valve enclosure assembly via the tubing that fluidly couples the valve enclosure assembly to the air bladder(s). The pressure monitoring port is located between the valve(s) and the air bladder(s).

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT Infringement Contentions The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor. Circuit Board of Processor Pressure Sensor (Photograph of Gen 3 Arco) The pressure monitor means is capable of being in fluid communication with the at least one valve for continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure sensor(s) to the pressure monitoring port(s) of the valve enclosure assembly, the pressure sensor is capable of being in fluid communication with the enclosure of the valve enclosure assembly. Because the valve is located just upstream of the pressure monitoring port, the valve and the pressure monitoring port are in fluid communication. Accordingly, the pressure sensor is capable of being in fluid communication with the valve. Tubing fluidly couples the valve enclosure assembly to the air bladder(s), the valve, pressure monitoring port, and air bladder(s) are capable of being in fluid

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	communication with each other. The pressure sensor and the processor of the press is therefore able to or capable of continuously monitoring the pressure in the air bla monitoring the pressure conveyed from the pressure monitoring port.	
	The Accused Products having a Gen X air controller include pressure monitor mean coupled to the processor. Specifically, the valve enclosure assembly of the Gen X is monitoring port, which is capable of being in fluid communication with the interior the valve enclosure assembly.	ncludes a pressure
	Gen X: Air Inlet	
	Enclosure of enclosure ass	
	Port in fluid communication with the interior of the enclosure of the valve enclosure assembly	
	(Photograph of Gen X)	

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT		Infringement Contentions	
	as discussed above, the pressure valve enclosure assembly via the	interior of of the values assembly	the enclosure of the assembly to the air air bladder(s). Valve (general location)
	(Photograph of the Gen X)	Fluidly couples the enclosure of the Valve Enclosure Assembly to an Air Bladder	

CLAIM ELEMENT	Infringement Contentions
	The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor.
	Pressure Sensor Circuit Board of Processor
	(Photograph of Gen X)
	The pressure monitor means is capable of being in fluid communication with the at least one valve for continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure sensor(s) to the pressure monitoring port(s) of the valve enclosure assembly, the pressure sensor is

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	capable of being in fluid communication with the enclosure of the valve enclosure assembly. Because the valve is located just upstream of the pressure monitoring port, the valve and the pressure monitoring port are in fluid communication. Accordingly, the pressure sensor is capable of being in fluid communication with the valve. Tubing fluidly couples the valve enclosure assembly to the air bladder(s), the valve, pressure monitoring port, and air bladder(s) are capable of being in fluid communication with each other. The pressure sensor and the processor of the pressure monitor means is therefore able to or capable of continuously monitoring the pressure in the air bladder(s) by monitoring the pressure conveyed from the pressure monitoring port.
	The Accused Products having a Gen 3 Koge air controller include pressure monitor means operably coupled to the processor. Specifically, the enclosure of the valve enclosure assembly of the Gen 3 Koge includes a pressure monitoring port, which is capable of being in fluid communication with the interior of the enclosure of the valve enclosure assembly.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS 8 Port in fluid communication with the interior of the enclosure of the valve enclosure assembly (Photograph of Gen 3 Koge) As seen in the photograph above, a tube is connected to the pressure monitoring port. The tube is also connected to a pressure sensor. In addition, and as discussed above, the valve is capable of being in fluid communication with the one or more air bladders via tubing that fluidly couples the two components. The valve is also just upstream of the pressure monitoring port, and is therefore capable

of being in fluid communication with the pressure monitoring port. Accordingly, when the pressure

CLAIM ELEMENT INFRINGEMENT CONTENTIONS from the pressure monitoring port is conveyed to the pressure sensor from the enclosure of the valve enclosure assembly via the tubing connected to the pressure monitoring port and pressure sensor, the pressure monitor means can monitor the pressure in the at least one bladder. Pressure Sensor Tube, connected to the pressure sensor and the port Port in fluid **Tubing Fluidly** communication with the Coupling the interior of the enclosure Valve of the valve enclosure Enclosure assembly Assembly to an Air Bladder (Photograph of the Gen 3 Koge)

Page 275

CLAIM ELEMENT INFRINGEMENT CONTENTIONS The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor. Pressure Sensor Circuit Board of Processor (Photograph of Gen 3 Koge)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Versions 1.8, 1.9, 1.92, 1.97, and 2.0 of the source code further demonstrate that Gen 3 Accused Products' processors are configured to monitor and do monitor, or are capable of monitoring, the pressure detected by the pressure sensor(s).

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

CLAIM ELEMENT	Infringement Contentions
	This limitation may further implicate other electronics, software, firmware, and/or source code of the Accused Products. Additional Source Code for the Accused Products may further show how this claim limitation is met. To resolve a dispute regarding Plaintiff's Notice of Inspection for Source Code, the parties have agreed that Plaintiff shall be allowed to inspect remaining Source Code for the Accused Products on mutually agreeable date(s), after which Plaintiff shall supplement its infringement contentions, pursuant to an agreed-upon timeline and without opposition, using the information learned during the inspection.
Claim 20	
[20.P] An improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air, a pump fluidly coupled to the at least one air bladder for providing compressed air thereto, and a processor for providing commands to the	The preamble of claim 20 is limiting and under the plain and ordinary meaning of these claim terms in light of the specification, each claim limitation is met by ANM's Accused Products. Specifically, the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air, a pump fluidly coupled to the at least one air bladder for providing compressed air thereto, and a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle, the improved valve enclosure assembly being fluidly coupled intermediate the pump and the at least one

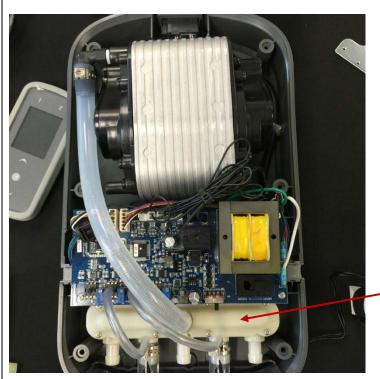
CLAIM ELEMENT

INFRINGEMENT CONTENTIONS

improved valve enclosure assembly during an inflate/deflate cycle, the improved valve enclosure assembly being fluidly coupled intermediate the pump and the at least one air bladder for controlling the inflation of the at least one air bladder, comprising:

air bladder for controlling the inflation of the at least one air bladder.

The Accused Products having a Gen 3 Arco air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:

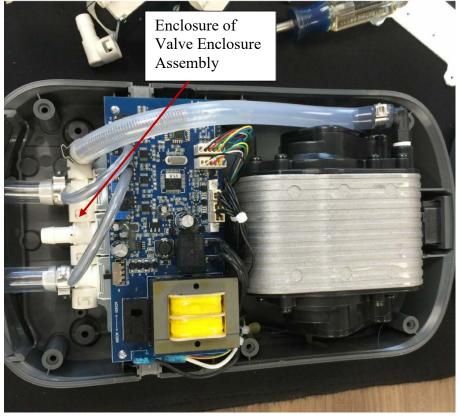


Enclosure of Valve Enclosure Assembly

(Photograph of Gen 3 Arco)

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen X air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:
	Enclosure of Valve Enclosure Assembly
	(Photograph of Gen X)
	The Accused Products having a Gen 3 Koge air controller include an improved valve enclosure assembly for use with an air inflatable mattress having at least one air bladder inflated by compressed air:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS



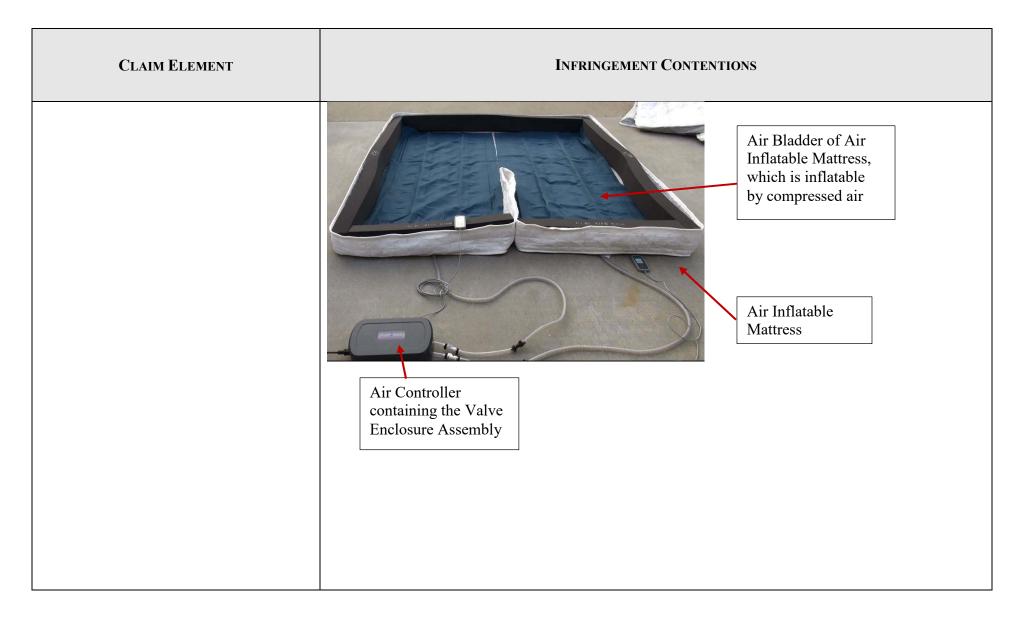
(Photograph of Gen 3 Koge)

The valve enclosure assemblies of the Gen 3 Arco, Gen X, and Gen 3 Koge are used with an air inflatable mattress having at least one air bladder inflated by compressed air. Non-limiting examples of said use is shown in the photographs below.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Air Inflatable Mattress Air Controller containing the Valve Enclosure Assembly

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Air Bladder of Air Inflatable Mattress, inflated by compressed air Air Bladder of Air Inflatable Mattress, deflated Air Bladder of Air Inflatable Mattress, which is inflatable by compressed air

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Air Inflatable Bladders of Air Mattress Inflatable Mattress. which are inflatable by compressed air 31 🔆 🎯 🗒 Air Controller containing the Valve **Enclosure Assembly** (Photograph of medical air mattress system) In the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers, the pump is fluidly coupled to the at least one air bladder for providing compressed air thereto. In the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers, the improved valve enclosure assembly is fluidly coupled intermediate the pump and the at least one air bladder for controlling the inflation of the at least one air bladder. As shown in the photographs below, the pump is fluidly coupled to the enclosure of the valve enclosure assembly via tubing. The enclosure of the valve enclosure assembly is then similarly fluidly coupled to the at least one air bladder with tubing. The pump provides compressed air to the at least one air bladder via the tubing between the pump and the enclosure of the valve enclosure assembly and the tubing between the valve enclosure assembly and the air bladder.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Pump Tubing Fluidly Coupling the Pump to the Valve Enclosure Assembly Enclosure of Valve Enclosure Assembly Tubing Fluidly Coupling the Pump to the Valve Enclosure Assembly (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions	
	Pum Valv	Pump ing Fluidly Coupling the property to the Enclosure of the Enclosure Assembly Enclosure of Valve Enclosure Assembly aidly Couples the closure of Valve Closure Assembly to Air Bladder

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Tubing Fluidly Coupling the Pump to the Enclosure of Valve Enclosure Assembly Pump Enclosure of Valve Enclosure of Valve Enclosure Assembly Coupling the Enclosure of Valve Enclosure Assembly to an Air Bladder (Photograph of Gen 3 Koge)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As shown in the example of a Gen 3 air controller being used with an inflatable air matress, the two tubes that fluidly couple to the valve enclosure assembly fluidly couple to the air bladders of the inflatable air matress. Because the pump is fluidly coupled to the air bladder, the air bladders inflate using the compressed air from the pump. Air Bladders of Air Inflatable Mattress, which are inflated using compressed air Tubing Fluidly Coupling the Valve Enclosure Assembly to an Air Bladder Air Controller containing the Valve Enclosure Assembly In the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers, a processor provides commands to the improved valve enclosure assembly during an inflate/deflate cycle:

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Arco: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Arco)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen X: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen X)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Koge: Printed Circuit Board for Processor, which provides commands to the improved valve enclosure assembly during an inflate/deflate cycle Enclosure of Valve Enclosure Assembly (Photograph of Gen 3 Koge) Versions 1.8, 1.97, and 2.0 of ANM's source code further demonstrate that the Gen 3 Accused Products include a processor for providing commands to the improved valve enclosure assembly during an inflate/deflate cycle.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

Infringement Contentions

CLAIM ELEMENT	Infringement Contentions
	This limitation may further implicate other electronics, software, firmware, and/or source code of the Accused Products. Additional Source Code for the Accused Products may further show how this claim limitation is met. To resolve a dispute regarding Plaintiff's Notice of Inspection for Source Code, the parties have agreed that Plaintiff shall be allowed to inspect remaining Source Code for the Accused Products on mutually agreeable date(s), after which Plaintiff shall supplement its

Page 299

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	infringement contentions, pursuant to an agreed-upon timeline and without opposition, using the information learned during the inspection.
	Even under Defendants' construction from the ITC proceeding, where a "valve enclosure assembly" means "an enclosure and a rear cover defining an internal, pressurized air chamber enclosing a valve," ANM's Gen 3 or Gen X air controllers meet this claim limitation.
	As seen in the photographs below, the enclosure of the Gen 3 Arco's valve enclosure assembly is comprised of an enclosure and a rear cover. Rear Cover of the Valve Enclosure Assembly Internal air chamber
	Enclosure of the Valve Enclosure Assembly
	Enclosure Enclosure with Rear Cover Removed
	(Photograph of the Gen 3 Arco)

CLAIM ELEMENT	Infringement Contentions
	Furthermore, as seen in the photograph below showing a side perspective view of the Gen 3 Arco's enclosure, the Gen 3 Arco the internal chamber is shown enclosing a valve.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Perspective view of the internal chamber enclosing a valve (Photograph of Gen 3 Arco)
	(

CLAIM ELEMENT INFRINGEMENT CONTENTIONS As seen in the photographs below, the enclosure of the Gen X's valve enclosure assembly is comprised of an enclosure and a rear cover. Rear Cover of the Valve **Enclosure Assembly** Internal air chamber Enclosure of the Valve Enclosure Assembly (Photograph of the Gen 3 Arco) Furthermore, as seen in the photograph below showing a side perspective view of the Gen 3 Arco's enclosure, the Gen 3 Arco the internal chamber is shown enclosing a valve.

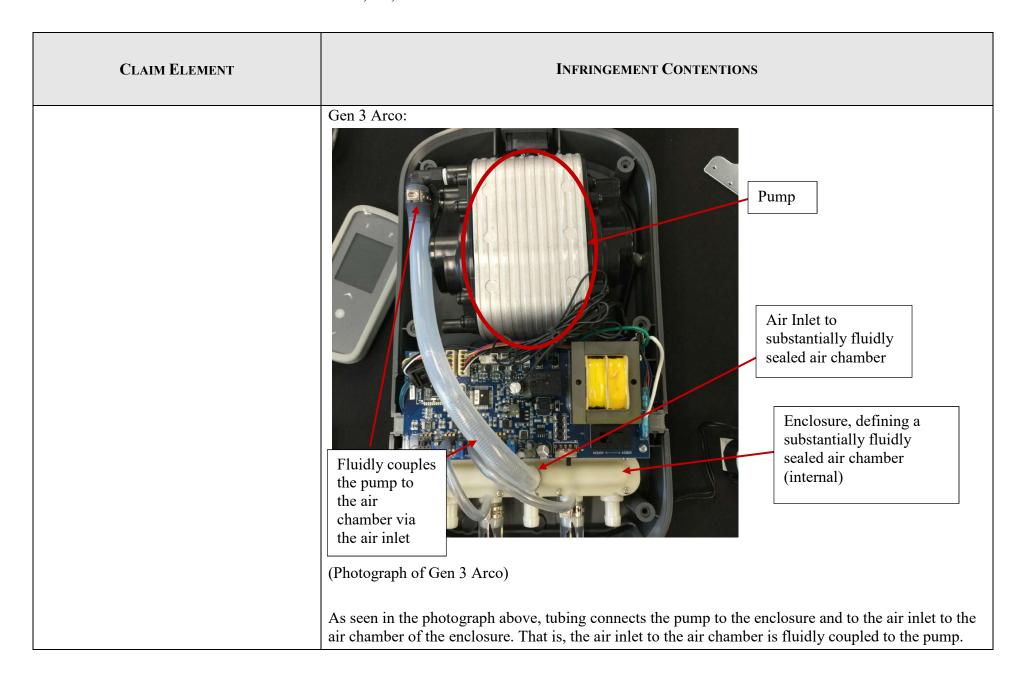
CLAIM ELEMENT INFRINGEMENT CONTENTIONS Internal Chamber Enclosing a Valve (Photograph of Gen 3 Arco)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	As seen in the photographs below, the enclosure of the Gen 3 Koge's valve enclosure assembly is comprised of an enclosure and a rear cover. The valve seal is contained within the enclosure, which shows how the enclosure and rear cover define an internal air chamber enclosing a valve.
	Rear Cover of the Valve Enclosure Assembly Internal air chamber enclosing a valve Enclosure of the Valve Enclosure Assembly
	Enclosure Enclosure with Rear Cover Removed
	(Photograph of the Gen 3 Koge)

CLAIM ELEMENT	Infringement Contentions
[20.1] an enclosure defining a substantially fluidly sealed air chamber and having at least one air inlet to the air chamber being fluidly coupled to the pump, the enclosure being formed of an enclosure portion and a rear cover portion, a flexible seal being compressively interposed between the enclosure portion and the rear cover portion to effect a substantially fluid tight seal therebetween;	Under the plain and ordinary meaning of the claim terms in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers include an enclosure defining a substantially fluidly sealed air chamber and having at least one air inlet to the air chamber being fluidly coupled to the pump, the enclosure being formed of an enclosure portion and a rear cover portion, a flexible seal being compressively interposed between the enclosure portion and a rear cover portion to effect a substantially fluid tight seal therebetween. The Accused Products having a Gen 3 Arco air controller include a valve enclosure assembly comprised, in part, of an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber and which is fluidly coupled to the pump.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure, which defines a Substantially Fluidly Sealed Air Chamber (Photograph of Gen 3 Arco)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Inlet (Photograph of Gen 3 Arco) As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more O-rings, which assist in substantially fluidly sealing the air chamber.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in substantially fluidly sealing the air chamber Air Chamber (Photograph of Gen 3 Arco's enclosure (depicted with the rear-cover removed for illustrative purposes).)

Page 310

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

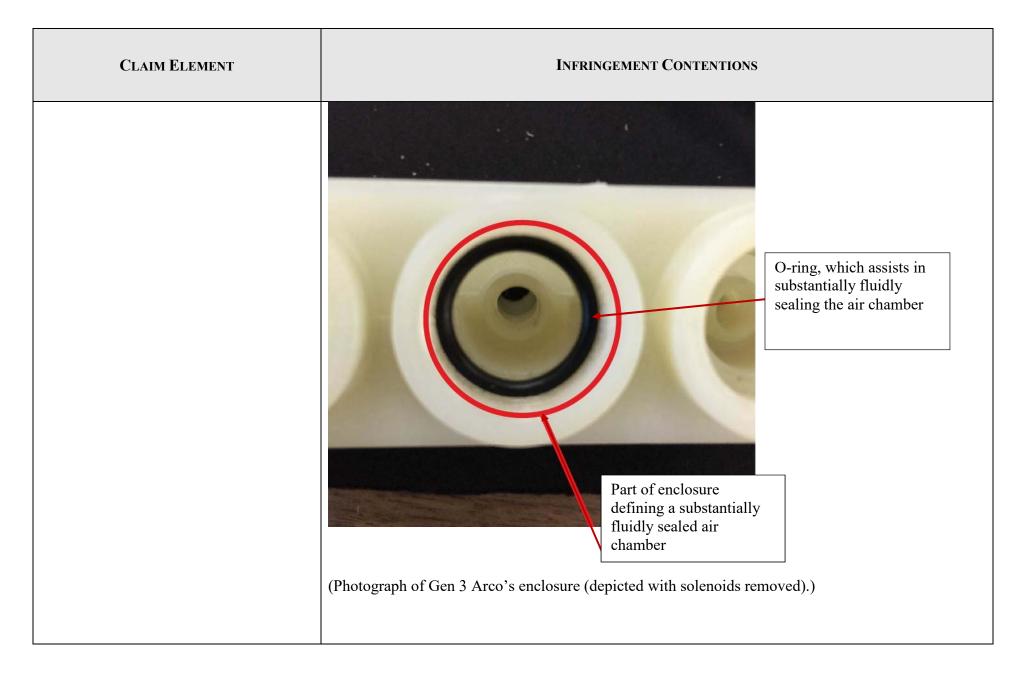


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen X air controller include a valve enclosure assembly comprised, in part, of an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber and which is fluidly coupled to the pump.
	Fluidly couples pump to the air chamber via the air inlet (Photograph of Gen X)

CLAIM ELEMENT	Infringement Contentions
	As seen in the photograph above, tubing connects the pump to the enclosure and to the air inlet to the air chamber of the enclosure. That is, the air inlet to the air chamber is fluidly coupled to the pump. Air inlet to substantially fluidly sealed air chamber of the enclosure (Photograph of Gen X) As further seen from the photographs below, the enclosure defines an air chamber. The air chamber
	includes one or more O-rings, which assist in substantially fluidly sealing the air chamber.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in Substantially Fluidly Sealing the Air Chamber (Photograph of Gen X's enclosure (depicted with the rear-cover and O-ring disassembled for illustrative purposes)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS O-ring, which assists in Substantially Fluidly Sealing the Air Chamber Part of enclosure defining a Substantially Fluidly Sealed Air Chamber (Photograph of Gen X's enclosure (depicted with a solenoid removed).)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen 3 Koge air controller include an enclosure defining a substantially fluidly sealed air chamber that has at least one air inlet to the air chamber, which is fluidly coupled to the pump.
	Gen 3 Koge: Air Inlet to Typing that fluidly
	Air Inlet to Substantially Fluidly Sealed Air Chamber Tubing that fluidly couples the pump to the air chamber via the air inlet
	Pump
	Enclosure, Defining a Substantially Fluidly Sealed Air Chamber (internal) (Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS As seen in the photograph above, tubing connects the pump to the enclosure and to the air inlet to the air chamber of the enclosure. That is, the air inlet to the air chamber is fluidly coupled to the pump. Enclosure, which defines a Substantially Fluidly Sealed Air Chamber Inlet to substantially fluidly sealed enclosure (Photograph of Gen 3 Koge) As further seen from the photographs below, the enclosure defines an air chamber. The air chamber includes one or more interlocking connectors, which assist in substantially fluidly sealing the air chamber.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Enclosure defining a substantially fluidly sealed air chamber (Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Substantially Fluidly Sealed Air Chamber Enclosure (Photograph of Gen 3 Koge's enclosure (depicted detached from other enclosure components).) When the Gen 3 and Gen X air controllers inflate the one or more air bladders, the pump, tubing that connects the pump to the air inlet, air chamber, and tubing connecting the air chamber to the one or more air bladders creates a substantially fluidly sealed environment substantially fluidly sealing the air chamber. That is, the enclosure contains several fluid tight seals and the tubing connecting the air bladders and pump to the enclosure creates a fluidly sealed environment such that the air chamber defined by the enclosure is substantially fluidly sealed. To the extent this limitation is not literally

CLAIM ELEMENT	Infringement Contentions
	present the limitation is met under the doctrine of equivalents because the substantially fluidly sealed environment performs substantially the same function as a substantially sealed air chamber in substantially the same way and to obtain the substantially same result. Accordingly, the air chamber defined by the enclosure meets the substantially fluidly sealed limitation.
	The Accused Products having a Gen 3 Arco air controller further include an enclosure being formed of an enclosure portion and a rear cover portion, a flexible seal being compressively interposed between the enclosure portion and a rear cover portion to effect a substantially fluid tight seal therebetween.
	As seen in the photographs below, the Gen 3 Arco's enclosure of the valve enclosure assembly is comprised of an enclosure portion and a rear cover portion. Furthermore, a flexible seal is compressively interposed between the enclosure portion and the rear cover portion, thereby creating a substantially fluid tight seal between the enclosure portion and the rear cover portion.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

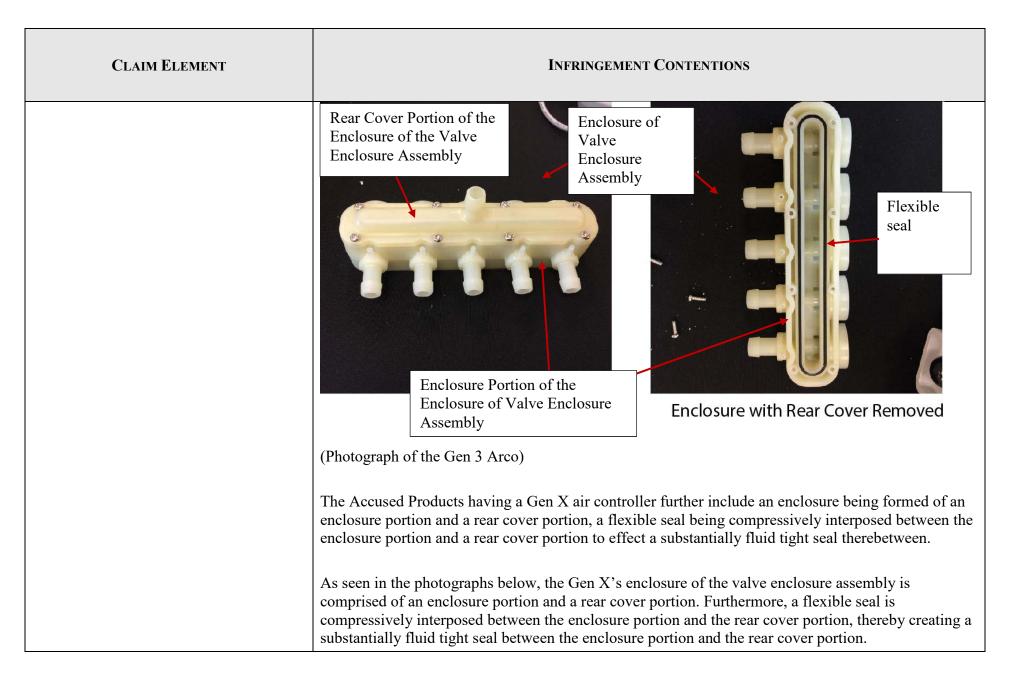


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

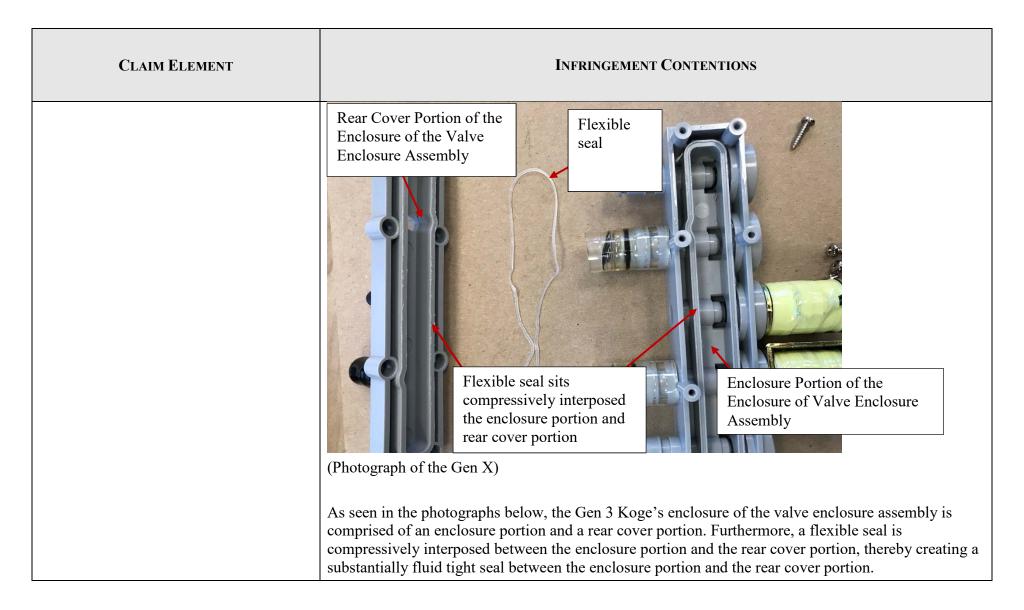


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Rear Cover Portion of the Enclosure Flexible Seal Enclosure of Valve Enclosure Assembly with Rear Cover Portion Removed [Photograph of the Gen 3 Koge]
[20.2] two or more valves being in fluid communication with both the exterior of the enclosure and with the air chamber; and	Under the plain and ordinary meaning of the claim terms in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers include two or more valves being in fluid communication with both the exterior of the enclosure and with the air chamber.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen 3 Arco air controller include at least two valves that are capable of being in fluid communication with both the exterior of the enclosure and with the air chamber. Each valve is created by a valve seat and the plunger of a solenoid. The valve seat is part of the mold that creates the enclosure of the valve enclosure assembly. The plunger of the solenoid is inserted into the enclosure of the valve enclosure assembly such that the plunger is capable of contacting the valve seat to close the valve.
	Valve Seat Solenoid
	(Photograph of Gen 3 Arco's valve enclosure assembly with a solenoid removed)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

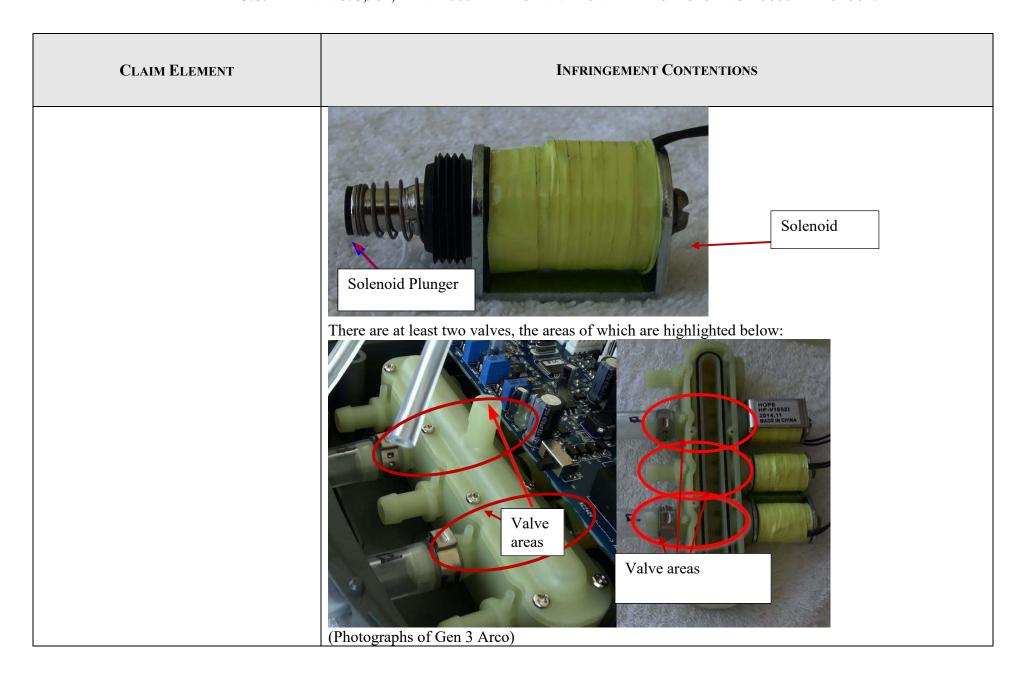


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contention	ONS
	The valves are fluidly coupled to the bladder(s) of an air inflatal the photographs below, tubing fluidly couples the valve enclosed. That is, air can flow from the valve through the tubing towards capable of being in fluid communication with the exterior of the	tre assembly to one or more bladders. the bladder. Accordingly, the valve is
	Tubing fluidly connecting valve of the valve enclosure assembly to bladder Air C	hamber hamber
	Enclosure of the Valve Enclosure Assembly (Photographs of Gen 3 Arco)	Enclosure of Valve Enclosure Assembly (rearcover removed)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Valve Seat of Valve (Photograph of Gen 3 Arco) Also, when the valve is open, air (represented by blue arrows) can pass from the air chamber of the enclosure of the valve enclosure assembly through the valve. Accordingly, the valve is capable of being in fluid communication with the air chamber.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Valve location (interior and not shown) Air Chamber of the Enclosure of the Valve **Enclosure Assembly** (Photograph of Gen 3 Arco) The Accused Products having a Gen X air controller include at least two valves that are capable of being in fluid communication with both the exterior of the enclosure and with the air chamber. Each valve is created by a valve seat and the plunger of a solenoid. The valve seat is part of the mold that creates the enclosure of the valve enclosure assembly. The plunger of the solenoid is inserted into the enclosure of the valve enclosure assembly such that the plunger is capable of contacting the valve seat to close the valve.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Valve Seat Solenoid (Photograph of Gen X's valve enclosure assembly with a solenoid removed)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Solenoid Solenoid Plunger (Photographs of Gen X)

Page 330

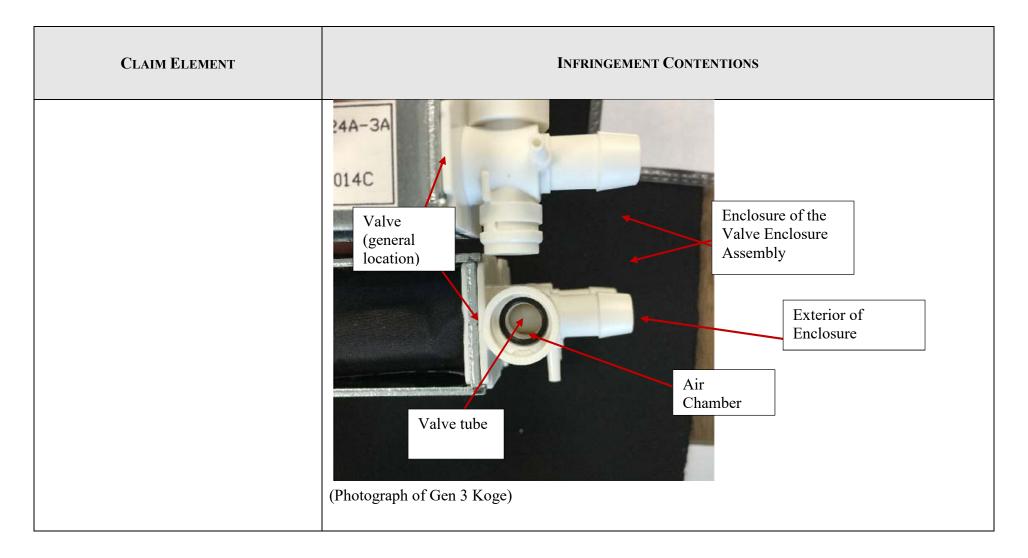
CLAIM ELEMENT	Infringement Contentions
	There are at least two valves, the areas of which are highlighted below: Valve areas (Photographs of Gen X)
	The valves are fluidly coupled to the bladder(s) of an air inflatable mattress. For example, as seen in the photographs below, tubing fluidly couples the valve enclosure assembly to one or more bladders. That is, air can flow from the valve through the tubing towards the bladder. Accordingly, the valve is capable of being in fluid communication with the exterior of the enclosure.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Rear-Cover of Enclosure of Valve Enclosure Assembly Tubing fluidly connecting valve of the valve enclosure assembly to bladder (additional tubing connecting to bladder(s) not shown) Enclosure of Valve Enclosure Assembly Air Chamber (Photographs of Gen X) Also, when the valve is open, air (represented by blue arrows) can pass from the air chamber of the enclosure of the valve enclosure assembly through the valve. Accordingly, the valve is capable of being in fluid communication with the air chamber.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Air Chamber of the Valve Enclosure Assembly (Photograph of Gen X)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS ALL D Air Chamber Valve Seat (Photograph of Gen X) (Photograph of Gen X) The Accused Products having a Gen 3 Koge air controller include at least two valves that are capable of being in fluid communication with both the exterior of the enclosure and with the air chamber. As shown below, the enclosure of the valve enclosure assembly of the Gen 3 Koge includes a plurality of valves fluidly connected to the air chamber. The photograph below shows a valve comprised of a valve seat (part of the mold of the enclosure) and a solenoid plunger of a solenoid inserted into the enclosure. The air chamber passes around a valve tube and can flow towards the valve. When the valve is open, air can flow down the valve tube to an exterior of the enclosure.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Exterior of Enclosure Air Chamber of the Enclosure of Valve Seat the Valve of Valve Enclosure Assembly (Photograph of Gen 3 Koge) The solenoid is seen in a partially deconstructed state below. The solenoid includes a solenoid plunger within the enclosure that is capable of connecting or coupling to the valve seat.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Solenoid (Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Solenoid Plunger Enclosure (Photograph of Gen 3 Koge) In addition, the valves are fluidly coupled to the bladder of an air inflatable mattress. For example, as seen in the photographs below, tubing fluidly couples the valve enclosure assembly to one or more bladders. Accordingly, the valves are capable of being in fluid communication with an exterior of the enclosure.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Valve (OGE 160108C Enclosure of the Valve **Enclosure Assembly** Tubing fluidly connecting valve enclosure assembly to bladder (exterior to enclosure) (Photographs of Gen 3 Koge) When the valve is open, air can pass to/from the air chamber of the enclosure of the valve enclosure assembly through the valve and through the tubing fluidly connecting the valve enclosure assembly to the bladder(s) of the air inflatable mattress. When the valve is closed, air from the air chamber cannot pass through the valve. Thus, the valves are capable of being in fluid communication with the air chamber and an exterior of the enclosure.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The photographs below show examples of how the Gen 3 and Gen X air controllers are configured to connect to air bladder(s) of an inflatable mattress. Bladder of an air inflatable mattress
	Tubing fluidly connecting valve enclosure assembly to bladder (exemplary photo of air mattress system)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Bladders of Air Tubing fluidly Inflatable Mattress. connecting valve which are inflatable enclosure assembly by compressed air to bladder 31 🔅 🎯 🗒 Air Controller containing the Valve **Enclosure Assembly** (Photograph of medical air mattress system) [20.3] pressure monitor means including a The "pressure monitor means" is a means-plus-function limitation subject to pre-AIA 35 U.S.C. § sensor being operably coupled to the 112, ¶ 6. The function is continuously monitoring the pressure in the at least one bladder. The processor and being in fluid structure is a port fluidly coupled to the interior of the valve enclosure assembly that is designed to communication with the at least one receive a tube, a pressure sensor, and a tube connected to the port and to the pressure sensor, and bladder through a pressure monitoring equivalents thereof. Under this construction, and where the other claim terms are given their plan and port defining an opening through the ordinary meaning in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge Air enclosure and into an interior of the air Controllers include a pressure monitor means including a sensor being operably coupled to the processor and being in fluid communication with the at least one bladder through a pressure chamber, the pressure sensor configured

CLAIM ELEMENT	Infringement Contentions
for continuously monitoring the pressure in the at least one bladder during an inflate/deflate cycle.	monitoring port defining an opening through the enclosure and into an interior of the air chamber, the pressure sensor configured for continuously monitoring the pressure in the at least one bladder during an inflate/deflate cycle.
	The Accused Products having a Gen 3 Arco air controller include pressure monitor means including a sensor operably coupled to the processor. Specifically, the valve enclosure assembly of the Gen 3 Arco includes a pressure monitoring port, which is capable of being in fluid communication with the interior of the enclosure of the valve enclosure assembly.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Gen 3 Arco: Air Pressure Monitoring Port
	As seen, the pressure monitoring port defines an opening into the enclosure. This opening continues through the enclosure and into the interior of the air chamber.
	As seen in the photograph below, a tube is connected to the pressure monitoring port. The tube is also connected to a pressure sensor. In addition, and as discussed above, the pressure in the one or more air

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	bladders is conveyed to the enclosure of the valve enclosure assembly via tubing that fluidly couples the valve enclosure assembly to the air bladder(s). The bladder pressure is conveyed to the pressure sensor from the pressure monitoring port. Pressure Sensor Tube, connected to the port Pressure Monitoring Port in fluid communication with the interior of the enclosure of the valve enclosure assembly (Photograph of the Gen 3 Arco) Tubing Fluidly Coupling the Valve Enclosure Assembly to an Air Bladder

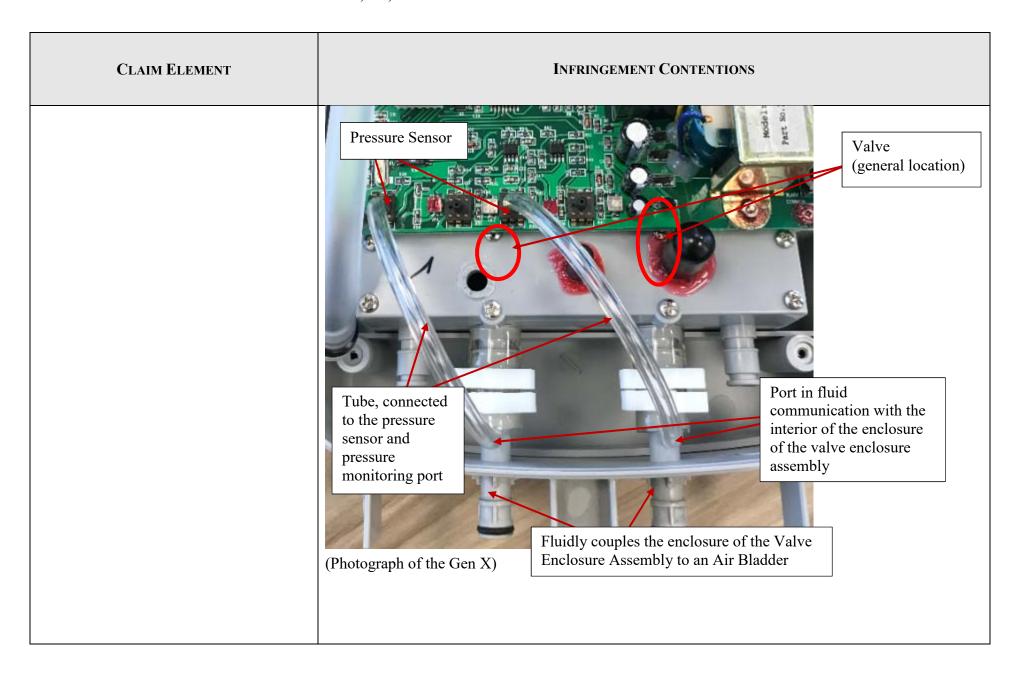
CLAIM ELEMENT INFRINGEMENT CONTENTIONS The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor, including during inflate and deflate cycles. Circuit Board of Processor Pressure Sensor (Photograph of Gen 3 Arco) The pressure monitor means is capable of being in fluid communication with the at least one bladder for continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure sensor(s) to the pressure monitoring port(s) of the valve enclosure assembly, the pressure sensor is in fluid communication with the enclosure of the valve enclosure assembly. Tubing fluidly couples the enclosure of the valve enclosure assembly to the air bladder(s). The pressure sensor and the processor are therefore able to continuously monitor the pressure in the air bladder(s).

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The Accused Products having a Gen X air controller include pressure monitor means including a sensor operably coupled to the processor. Specifically, the valve enclosure assembly of the Gen X includes a pressure monitoring port, which is capable of being in fluid communication with the interior of the enclosure of the valve enclosure assembly. While the pressure monitoring port does not literally define an opening through the enclosure, it meets this limitation under the doctrine of equivalents. That is, the pressure monitoring port defines an opening through a port enclosure, which is fluidly coupled to the interior of the enclosure. That is, the pressure monitoring port defines an opening that is capable of being in fluid communication with the interior of the air chamber to perform substantially the same function in substantially the same way to obtain the substantially same result. Gen X: Air Inlet Enclosure of the valve
	Tubing structure allowing fluid communication between opening of pressure monitoring port and the interior of the air chamber Pressure Monitoring Port Port Enclosure
	(Photograph of Gen X)

CLAIM ELEMENT	Infringement Contentions
	As seen, the pressure monitoring port defines an opening. This opening continues into the port enclosure. The interior of the port enclosure is capable of being in fluid communication with the interior area of the air chamber of the enclosure via the tubing structure, identified above.
	As seen in the photograph below, a tube is connected to the pressure monitoring port. The tube is also connected to a pressure sensor. In addition, and as discussed above, the pressure in the one or more air bladders is conveyed to the port enclosure and the enclosure of the valve enclosure assembly via tubing that fluidly couples the valve enclosure assembly to the air bladder(s). The bladder pressure is conveyed to the pressure sensor from the pressure monitoring port.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor, including during inflate and deflate cycles. Pressure Sensor Circuit Board of Processor (Photograph of Gen X) The pressure monitor means is capable of being in fluid communication with the at least one bladder for continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure

CLAIM ELEMENT	Infringement Contentions
	sensor(s) to the pressure monitoring port(s) of the valve enclosure assembly, the pressure sensor is in fluid communication with the enclosure of the valve enclosure assembly. Tubing fluidly couples the enclosure of the valve enclosure assembly to the air bladder(s). The pressure sensor and the processor are therefore able to continuously monitor the pressure in the air bladder(s).
	The Accused Products having a Gen 3 Koge air controller include pressure monitor means operably coupled to the processor. Specifically, the valve enclosure assembly of the Gen 3 Koge includes a pressure monitoring port in fluid communication with the interior of the enclosure of the valve enclosure assembly and the air bladder.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Gen 3 Koge: 8 **Pressure Monitoring Port** in fluid communication with the interior of the enclosure of the valve enclosure assembly (Photograph of Gen 3 Koge) As seen, the pressure monitoring port defines an opening into the enclosure. This opening continues through the enclosure and into the interior area of the air chamber. As seen in the photograph below, a tube is connected to the pressure monitoring port. The tube is also connected to a pressure sensor. In addition, and as discussed above, the pressure in the one or more air

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	Tubing Fluidly Coupling the Valve Enclosure Assembly to an Air Bladder (Photograph of the Gen 3 Koge)

CLAIM ELEMENT	Infringement Contentions
	The pressure sensor is operatively coupled to a processor. The processor is configured to monitor and capable of continuously monitoring the pressure detected by the pressure sensor, including during inflate and deflate cycles. Pressure Sensor Circuit Board of Processor (Photograph of Gen 3 Koge)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The pressure monitor means is capable of being in fluid communication with the at least one bladder for continuously monitoring the pressure in the at least one bladder. Tubing connects the pressure sensor(s) to the pressure monitoring port(s) of the valve enclosure assembly, the pressure sensor is in fluid communication with the enclosure of the valve enclosure assembly. Tubing fluidly couples the enclosure of the valve enclosure assembly to the air bladder(s). The pressure sensor and the processor are therefore able to continuously monitor the pressure in the air bladder(s).
	Versions 1.8, 1.97, and 2.0 of ANM's source code further demonstrate that Gen 3 Accused Products' processors are configured to monitor and do continuously monitor, or are capable of continuously monitoring, the pressure detected by the pressure sensor(s).

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

Infringement Contentions

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

Infringement Contentions

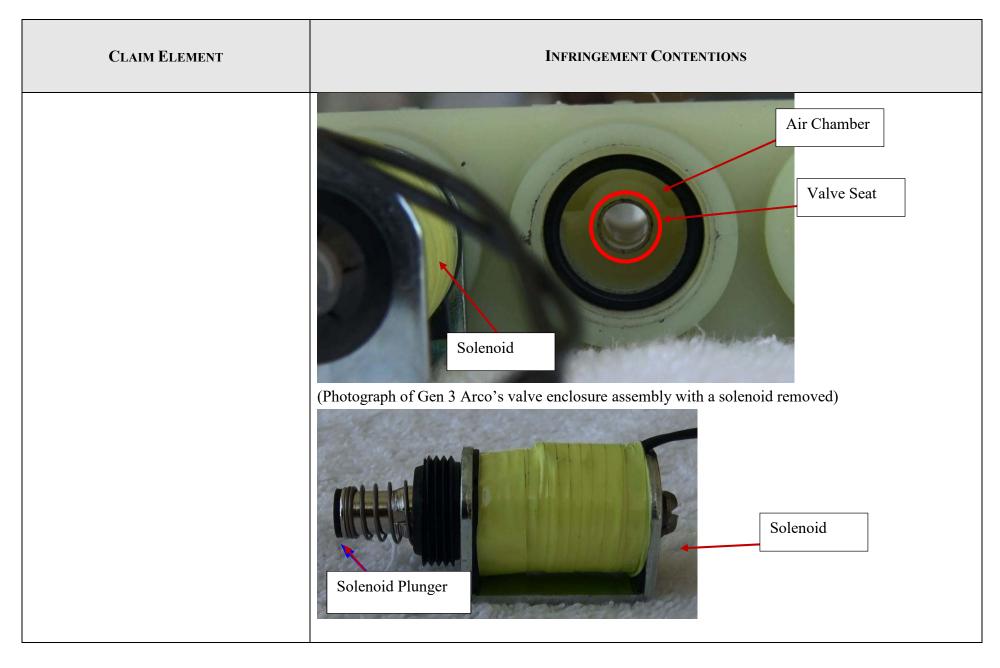
EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions

CLAIM ELEMENT	Infringement Contentions
	This limitation may further implicate other electronics, software, firmware, and/or source code of the Accused Products. Additional Source Code for the Accused Products may further show how this claim limitation is met. To resolve a dispute regarding Plaintiff's Notice of Inspection for Source Code, the parties have agreed that Plaintiff shall be allowed to inspect remaining Source Code for the

CLAIM ELEMENT	Infringement Contentions
	Accused Products on mutually agreeable date(s), after which Plaintiff shall supplement its infringement contentions, pursuant to an agreed-upon timeline and without opposition, using the information learned during the inspection.
Claim 22	
[22.1] The improved valve enclosure assembly of claim 2 further including at least one solenoid configured to operate a valve, wherein the at least one solenoid is at least partially received within the air chamber of the enclosure.	Under the plain and ordinary meaning of the claim terms in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge air controllers have an improved valve enclosure assembly further including at least one solenoid configured to operate a valve, wherein the at least one solenoid is at least partially received within the air chamber of the enclosure.
chamber of the enclosure.	The Accused Products having a Gen 3 Arco air controller include at least one solenoid configured to or capable of operating a valve, wherein the at least one solenoid is at least partially received within the air chamber of the enclosure. Specifically, the valve enclosure assembly of the Gen 3 Arco includes a plurality of valves operably coupled to the enclosure. The valve is created by a valve seat and the plunger of a solenoid. The valve seat is part of the mold that creates the enclosure of the valve enclosure assembly. The plunger of the solenoid is inserted into the enclosure of the valve enclosure assembly (shown in the example to the left below) such that the plunger is capable of contacting the valve seat to close the valve. Therefore, the solenoid is at least partially received within the air chamber of the enclosure.

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT	Infringement Contentions
	The solenoid is configured to or capable of operating the valve by extending or retracting the solenoid plunger: Valve areas (Photographs of Gen 3 Arco)
	When the solenoid plunger is retracted the valve opens and air can pass from the air chamber of the enclosure of the valve enclosure assembly through the valve. When the solenoid plunger extends into the enclosure of the valve enclosure assembly and operably connects to the valve seat, the valve is closed; air can no longer pass through the valve. The Accused Products having a Gen X air controller include at least one solenoid configured to or
	capable of operating a valve, wherein the at least one solenoid is at least partially received within the air chamber of the enclosure. Specifically, the valve enclosure assembly of the Gen X includes a plurality of valves operably coupled to the enclosure. The valve is created by a valve seat and the

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	plunger of a solenoid. The valve seat is part of the mold that creates the enclosure of the valve enclosure assembly. The plunger of the solenoid is inserted into the enclosure of the valve enclosure assembly (shown in the example to the left below) such that the plunger is capable of contacting the valve seat to close the valve. Therefore, the solenoid is at least partially received within the air chamber of the enclosure.
	Air Chamber Valve Seat Solenoid
	(Photograph of Gen 3 Arco's valve enclosure assembly with a solenoid removed)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Solenoid Solenoid Plunger (Photographs of Gen X)

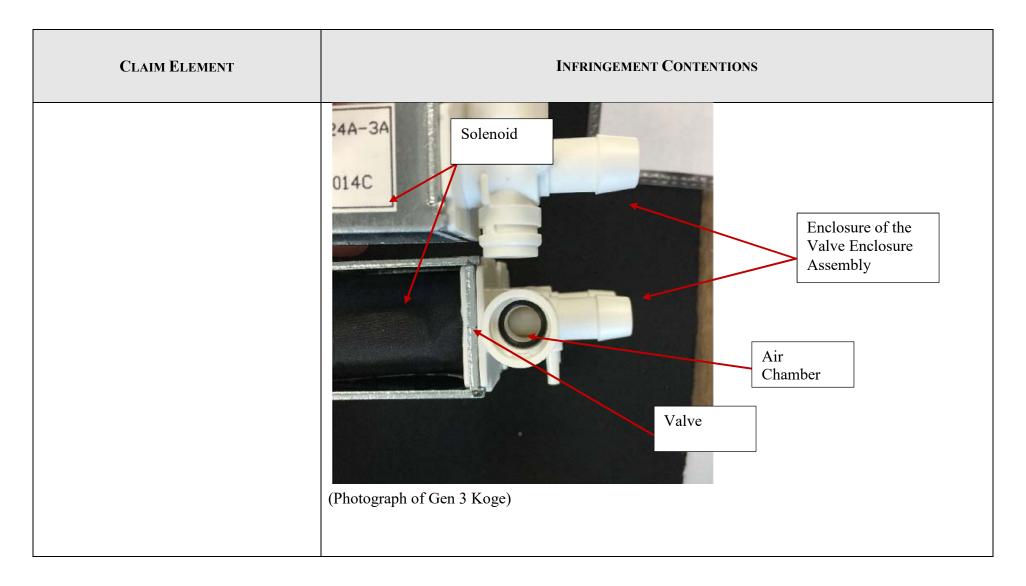
EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	The solenoid is configured to or capable of operating the valve by extending or retracting the solenoid plunger: Solenoid Air Chamber of the Valve Enclosure Assembly (Photograph of Gen X)

EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

CLAIM ELEMENT	Infringement Contentions
	When the solenoid plunger is retracted the valve opens and air (represented by blue arrows) can pass from the air chamber of the enclosure of the valve enclosure assembly through the valve. When the solenoid plunger extends into the enclosure of the valve enclosure assembly and operably connects to the valve seat, the valve is closed; air can no longer pass through the valve.
	The Accused Products having a Gen 3 Koge air controller include at least one solenoid configured to or capable of operating a valve, wherein the at least one solenoid is at least partially received within the air chamber of the enclosure. Specifically, the valve enclosure assembly of the Gen 3 Koge includes a plurality of valves operably coupled to the enclosure. The valve is created, at least in part, by the plunger of a solenoid being inserted into the enclosure of the valve enclosure assembly such that the plunger is capable of closing the valve. Therefore, the solenoid is at least partially received within the air chamber of the enclosure.
	The valve enclosure assembly of the Gen 3 Koge includes a plurality of valves fluidly connected to the bladder. The photograph below shows a valve in that is partially contained within the enclosure of the valve enclosure assembly of the Gen 3 by Koge device. That is, when the modular valve enclosure assembly elements are connected, the valve is, at least partially, contained within the substantially fluidly sealed air chamber of the enclosure of the valve enclosure assembly. When the solenoid plunger is retracted the valve opens and air can pass from the air chamber of the enclosure of the valve enclosure assembly through the valve. When the solenoid plunger extends into the enclosure of the valve enclosure assembly and operably closes the valve air can no longer pass through the valve.

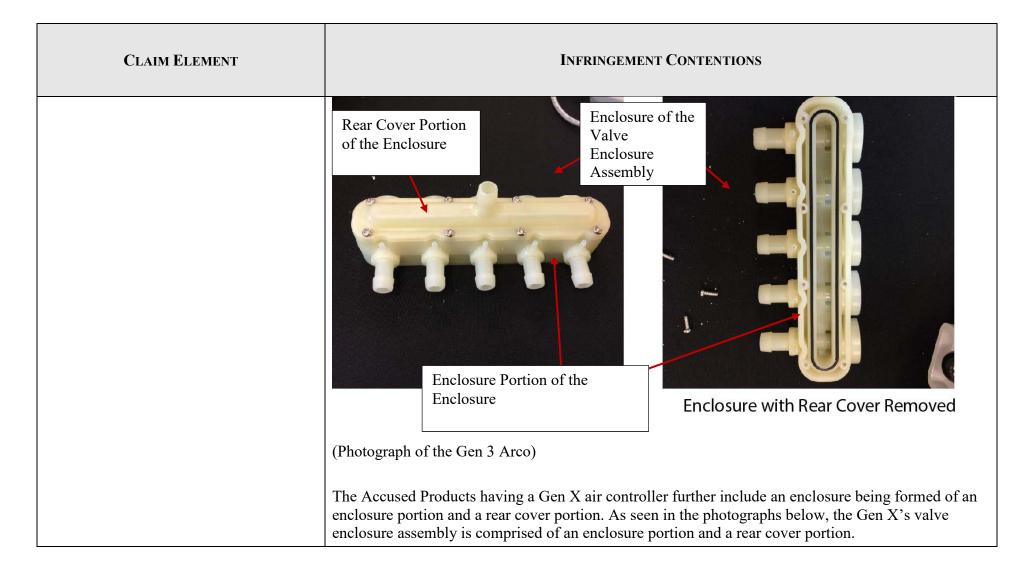
EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS



CLAIM ELEMENT INFRINGEMENT CONTENTIONS Valve Seat of Valve (Photograph of Gen 3 Koge) The solenoid is seen in a partially deconstructed state below. The solenoid includes a solenoid plunger within the enclosure that is capable of connecting or coupling to the valve seat.

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Solenoid (Photograph of Gen 3 Koge)

CLAIM ELEMENT INFRINGEMENT CONTENTIONS Solenoid Plunger Enclosure (Photograph of Gen 3 Koge) Claim 24 [24.1] The improved valve enclosure Under the plain and ordinary meaning of the claim terms in light of the specification, the Gen 3 Arco, Gen X, and Gen 3 Koge Air Controllers have an improved valve enclosure assembly wherein the assembly of claim 2 wherein the enclosure enclosure is formed of an enclosure portion and a rear cover portion. is formed of an enclosure portion and a rear cover portion. The Accused Products having a Gen 3 Arco air controller further include an enclosure being formed of an enclosure portion and a rear cover portion. As seen in the photographs below, the Gen 3 Arco's valve enclosure assembly is comprised of an enclosure portion and a rear cover portion.



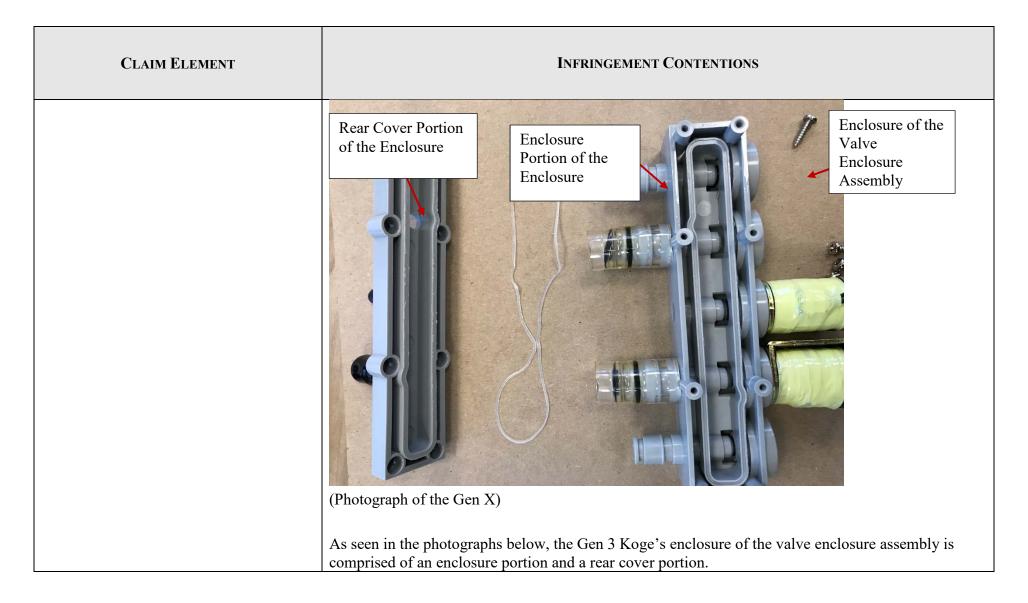


EXHIBIT A1 - U.S. PATENT NO. 5,904,172 VERSUS AMERICAN NATIONAL MANUFACTURING ACCUSED PRODUCTS

