United States District Court,
S.D. New York.

HYPOXICO, INC,
Plaintiff/Counter Defendant.
v.
COLORADO ALTITUDE TRAINING, LLC, and Lawrence Kutt, Defendants/Counter-Plaintiffs,
and Third-Party Plaintiffs.

and

Aga Ag,
Involuntary Counter-Plaintiff.
v.
Igor K. Kotliar,
Third-Party Defendant.

No. 02 Civ. 6191(JGK)

Sept. 4, 2008.

OPINION AND ORDER

JOHN G. KOELTL**, District Judge.**

Hypoxico, Inc. brings this action against the defendants, Colorado Altitude Training, LLC and its president, Mr. Lawrence Kutt (collectively "CAT"), alleging that CAT infringed Hypoxico's patents, including United States Patents Nos. 5,964,222 ("the '222 Patent") and 5,799,652 ("the '652 Patent"). FN1 CAT denies any infringement and has filed a counterclaim against Hypoxico and its president, Mr. Igor (Gary) Kotliar (collectively "Hypoxico"), for infringement of United States Patent No. 5,860,857 ("the ' 857 Patent"). AGA Aktiebolag ("AGA") has been joined as an involuntary counter-plaintiff on the counterclaim because of its interest in the ' 857 Patent. Hypoxico now moves pursuant to Rule 56 of the Federal Rules of Civil Procedure for summary judgment on its infringement claims with respect to claims 4, 5, 13, and 17-19 of the ' 652 Patent, and claims 3, 16, and 17 of the ' 222 Patent, and for summary judgment dismissing CAT's infringement claims with respect to the ' 857 patent.

FN1. The complaint includes a claim for infringement of U.S. Patent No. 5,924, 419 ("the '419 Patent' "). Hypoxico has not moved for summary judgment regarding the '419 Patent.

I.

The facts are set forth in the Court's prior Opinion and Order, Hypoxico, Inc. v. Colorado Altitude Training

LLC, 2003 WL 21649437 (S.D.N.Y. July 14, 2003), and repeated to the extent necessary to decide the present motion.

The following facts are undisputed unless otherwise noted. Hypoxico is a Delaware corporation with its principal place of business in New York, New York. CAT is a Colorado limited liability corporation with its principal place of business in Boulder, Colorado. Mr. Kutt, a citizen of Colorado, is the president of CAT. All parties are involved in the sale of lowoxygen content ("hypoxic") equipment meant to simulate high altitude conditions.

The patents at issue in the complaint are directed to hypoxic training equipment invented by Mr. Kotliar. Hypoxic equipment simulates high altitude conditions. It does so by providing a reduced oxygen content in the structure even though the air pressure in the structure is not the low pressure that prevails at high altitudes. Hypobaric equipment would simulate high altitude conditions by producing low pressure in the chamber. Hypoxico alleges that CAT produces products that infringe on Hypoxico's patents.

The '652 Patent is entitled "Hypoxic Room System and Equipment for Hypoxic Training and Therapy at Standard Atmospheric Pressure," and was issued on September 1, 1998. It is a continuation-in-part ("CIP") of United States Patent No. 5,850,853. The '222 Patent is entitled "Hypoxic Tent System," and was on October 12, 1999. The '222 Patent is a CIP of the '652 Patent. The '857 Patent was granted on January 19, 1999 and was assigned to AGA, which subsequently granted an exclusive license to CAT.

II.

The standard for granting summary judgment is well established. Summary judgment may not be granted unless "the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed.R.Civ.P. 56(c); *see also* Celotex Corp. v. Catrett, 477 U.S. 317 (1986); University of Colorado Foundation, Inc. v. American Cyanamic Co., 196 F.3d 1366 (Fed.Cir.1999). The trial court's duty at the summary judgment motion stage of the litigation is merely to discern "whether there are disputed material facts;" it does not extend to resolving any such disputes. SunTiger, Inc. v. Scientific Research Funding Group, 189 F.3d 1327, 1333 (Fed.Cir.1999); *see also* Lemelson v. TRW, Inc., 760 F.2d 1254, 1260 (Fed.Cir.1985) ("[f]or summary judgment, fact-finding is an inappropriate exercise"). The moving party bears the initial burden of "informing the district court of the basis for its motion" and identifying the matter that "it believes demonstrate[s] the absence of a genuine issue of material fact." Celotex, 477 U.S. at 323. Where the nonmoving party bears the burden of proof, summary judgment is appropriate if the moving party can show "that there is an absence of evidence to support the nonmoving party's case." Id. at 325. The substantive law governing the case will identify those facts which are material and "only disputes over facts that might affect the outcome of the suit under the governing law will properly preclude the entry of summary judgment." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986).

In determining whether summary judgment is appropriate, a court must resolve all ambiguities and draw all reasonable inferences against the moving party. *See* Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986) (citing United States v. Diebold, Inc., 369 U.S. 654, 655 (1962)). If the moving party meets its burden, the burden shifts to the nonmoving party to come forward with "specific facts showing a genuine issue for trial ." Fed.R.Civ.P. 56(e)(2). The nonmoving party must "point to an evidentiary conflict created on the record," and may not rely only on "mere denials or conclusory statements." Armco, Inc. v. Cyclops Corp., 791 F.2d 147, 149 (Fed.Cir.1986); *see also* Applied Companies v. Unites States, 144 F.3d

1470, 1475 (Fed.Cir.1998) ("It is well settled that 'a conclusory statement on the ultimate issue does not create a genuine issue of fact.' ") (quoting Imperial Tobacco Ltd v. Philip Morris, Inc., 899 F.2d 1575, 1581 (Fed Cir.1990)). With respect to the issues on which summary judgment is sought, if there is any evidence in the record from any source from which a "reasonable inference" could be drawn "in favor of the non-movant," summary judgment is improper. Roche Palo Alto LLC v. Apotex, Inc., 531 F.3d 1372, 1377 (Fed.Cir.2008).

III.

Infringement analysis is a two-step process: "The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the device accused of infringing." Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed.Cir.1995) (en banc) (citation omitted), *aff'd* 517 U.S. 370 (1996); *see also N.* Am. Container, Inc. v. Plastipak Packaging, Inc., 415 F.3d 1335, 1344 (Fed.Cir.2005).

Claim construction, the first step in infringement analysis, is a matter of law. *See* Markman, 52 F.3d at 979. Courts determine the scope of a claim by applying well-known principles of claim construction and examining three relevant sources: the language of the claim, the specification and the prosecution history. *See* Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1583 (Fed.Cir.1996); *see generally* Phillips v. AWH Corp, 415 F.3d 1303, 1312-17 (Fed.Cir.2005).

The language of a claim provides the starting point in a claim construction analysis. *See* Phonometrics, Inc. v. Northern Telecom Inc., 133 F.3d 1459, 1464 (Fed.Cir.1998). "Absent a special and particular definition created by the patent applicant, terms in a claim are to be given their ordinary and accustomed meaning." Renishaw PLC v. Marposs Societa' Per Azioni, 158 F.3d 1243, 1249 (Fed.Cir.1998). "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention...." Phillips, 415 F.3d at 1313.

The specification, however, is also highly relevant to the claim construction analysis, because it is the best guide to the meaning of a disputed term. Id. at 1315 (citing Markman, 52 F.3d at 978). A court in its discretion may consider extrinsic evidence including expert and inventor testimony, dictionaries, and learned treatises, although the Court of Appeals for the Federal Circuit has indicated that extrinsic evidence is less significant than the intrinsic record and that the Court should discount expert testimony that is clearly inconsistent with the construction of the claim indicated by the written record. Phillips, 415 F.3d at 1317-19.

With respect to the second step of infringement analysis, literal infringement requires that the accused device embody every limitation of a claim. *See* Southwall Tech., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1575 (Fed.Cir.1995). FN2 If the parties only dispute claim construction and do not dispute relevant facts concerning the structure and operation of the accused products, "the question of literal infringement collapses into claim construction and is amenable to summary judgment." Gen. Mills, Inc. v. Hunt-Wesson, Inc., 103 F.3d 978, 983 (Fed.Cir.1997); *see also* Mymail, Ltd. v. America Online, Inc., 476 F.3d 1372, 1378 (Fed.Cir.2007). This second step of infringement analysis is a question of fact, and therefore summary judgment on a claim of literal infringement issue is appropriate "when no genuine issue of material fact exists, in particular, when no reasonable jury could find that every limitation recited in the properly construed claim either is or is not found in the accused device." Bai v. L & L Wings, Inc., 160 F.3d 1350, 1353 (Fed.Cir.1998).

FN2. Hypoxico only seeks summary judgment on its claim of literal infringement. It does not in the alternative seek summary judgment on a claim of infringement under the doctrine of equivalents. For a discussion of that doctrine, *see* Festo Corp v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722 (2007).

IV.

A.

The asserted claims FN3 of the ' 652 Patent claim are as follows: FN4

FN3. The parties have not indicated that it is necessary for the Court to construe any claims not asserted in the motion for summary judgment or any terms of the asserted claims not briefed in the motion.

FN4. Hypoxico does not seek summary judgment on independent claims 1 and 11 of the '652 Patent, or independent claims 1 and 6 of the '222 Patent. However, the dependent claims for which summary judgment is sought depend on these independent claims and therefore it is necessary to construe those independent claims as well.

1. A system for use in an external atmospheric environment of air at an external ambient air pressure and having an ambient oxygen concentration for providing a reduced-oxygen atmosphere to a user, said system comprising:

a gas separation device having an inlet intaking an intake gas mixture and first and second outlets, said first outlet transmitting a first gas mixture derived from said intake gas mixture and having a higher oxygen content than the intake gas mixture and said second outlet transmitting a second gas mixture derived from said intake gas mixture and having a lower oxygen content than the intake gas mixture;

a breathing chamber having an internal space therein containing air and including an entry communicating with said internal space and through which the user can enter said internal space;

said second outlet communicating with said internal space and transmitting said second mixture to said internal space so that said second mixture mixes with the air in the internal space;

said first outlet transmitting said first gas mixture to the external atmospheric environment; and

said breathing chamber permitting the communication of air in at least one direction between the external atmospheric environment and the internal space and in combination with the gas separation device, maintaining the air in the internal space at a pressure generally equalized with the ambient air pressure of the external atmospheric environment and at a substantially constant concentration of oxygen substantially lower than said external ambient oxygen concentration.

4. The invention according to claim 1 and

said breathing chamber having vents therein, said vents providing for flow of air between said external atmospheric environment and said internal space.

5. The invention according to claim 4 and

said vents having apertures therein through which air can flow in either direction between said internal space and said external atmospheric environment.

11. A system for use in an external atmospheric environment of air at an external ambient air pressure for providing a low-oxygen environment for a user, said system comprising:

a chamber comprising a door and wall structure defining a closed space into which the user can enter through the door;

a gas processing device having an intake and first and second outlets, said device intaking a gas mixture through said intake and emitting a reduced oxygen gas mixture having a lower concentration of oxygen than said gas mixture through said first outlet and emitting an enriched-oxygen gas mixture having a greater concentration of oxygen than said gas mixture through said second outlet;

said first outlet being connected with said chamber so that the reduced-oxygen gas mixture is emitted into said closed space inside the chamber and mixes with the air therein;

said chamber having apertures therein allowing communication therethrough of air in the outside environment with air in the chamber, said chamber and said gas processing device maintaining the air in the closed space at a pressure substantially equal to the external ambient air pressure and at a substantially constant oxygen concentration lower than the air outside the chamber;

said gas processing device comprising a separation unit to which the intake gas mixture from the inlet is transmitted, said separation unit separating the intake gas mixture into a reduced oxygen gas mixture with an oxygen concentration lower than said intake gas mixture and an enriched oxygen gas mixture with an oxygen concentration higher than said intake gas mixture, said separation unit having a reduced oxygen mixture conduit through which said reduced oxygen gas mixture is transmitted and an enriched oxygen mixture conduit through which said enriched oxygen gas mixture is transmitted;

said first outlet being operatively associated with said reduced oxygen mixture conduit and receiving said reduced oxygen gas mixture therefrom, said second outlet being operatively associated with said enriched oxygen mixture conduit and receiving said enriched oxygen gas mixture therefrom and releasing said enriched oxygen gas mixture to the external atmospheric environment.

13. The invention according to claim 11 and

said separation unit comprising a pump applying said intake gas mixture to a pressure swing adsorption device having molecular sieve material which adsorbs nitrogen from the intake gas mixture being compressed by said pump, leaving the enriched oxygen gas mixture which is transmitted to said enriched oxygen conduit and is discharged to the external atmospheric environment outside said chamber and said adsorption device on depressurization releasing a nitrogen concentrate gas which is transmitted as said reduced oxygen gas mixture to said reduced oxygen conduit and is released into said chamber.

17. The invention according to claim 11 and

said intake intaking the intake gas mixture from the air of the external atmospheric environment outside the chamber.

18. The invention according to claim 17 and

said apertures in said chamber being located in a lower portion of the chamber.

19. The invention according to claim 11 and

said apertures providing openings in said wall structure.

The asserted claims of the '222 Patent claim are as follows:

1. A system for providing a reduced-oxygen atmosphere for breathing to a user at rest, said system comprising:

an oxygen-extraction device having an inlet taking in ambient air and an outlet for transmitting oxygen-depleted air;

a portable tent having internal space therein and an entry communicating with said internal space and through which the user can enter said internal space; said tent having collapsible supporting structure;

said outlet communicating with said internal space and transmitting said oxygen-depleted air to said internal space;

said internal space communicating with an external environment through naturally existing gaps and fabric pores, allowing excess air to escape said internal space and equalizing atmospheric pressure inside said tent to the outside parameter.

3. The system according to claim 1 and said hypoxic tent made of soft synthetic or natural material and supported by supporting structure, which is inflatable or assembled from segments made from metal, plastic or composite material.

6. A portable travel system for providing a low-oxygen environment to a user for sleeping comprising:

a breathing tent comprising soft walls supported by a supporting structure and an entry defining a closed space for, accessible to the user through said entry being selectively closable so that when closed, the tent is substantially isolated from the outside environment;

a gas-processing device having outlet communicating with said closed space and transmitting oxygen-depleted gas mixture through said outlet inside said closed space.

16. The system according to claim 6 and said gas-processing device employing pressure-swing adsorption technology to provide said oxygen-depleted gas mixture.

17. The system according to claim 6 and said oxygen-depleted gas mixture being cleaned by HEPA filter

and chilled by air cooler before entering said closed space inside said tent.

B.

1. CAT argues that the term "generally equalized" in claim 1 of the '652 Patent requires that the pressures on the interior and the exterior of the system be exactly equal. However, this proposed construction would vitiate the modifiers "generally" and "substantially". Based on the plain language of the claims, therefore, the Court construes these terms to require that the air pressure on the interior and the exterior of the system be close to, but not necessarily the same as, the ambient air pressure. *See* Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc., 340 F.3d 1298, 1310-11 (Fed.Cir.2003) (reversing the district court's construction of "generally parallel" that limited the term to the ordinary meaning of "parallel"). FN5 As the Court of Appeals explained: "While the term 'generally parallel'... is mathematically imprecise, ... words of approximation, such as 'generally' and 'substantially' are descriptive terms commonly used in patent claims to avoid a strict mathematical boundary to the specified parameter." *Id*. (internal citation and quotation marks omitted). For the same reasons, the Court will apply the same construction to the term "substantially equal" in claim 11 of the ' 652 Patent and "equalizing atmospheric pressure" in claim 1 of the ' 222 Patent.FN6

FN5. In *Anchor Wall,* the Court of Appeals for the Federal Circuit construed "generally parallel" such that "exact parallelism is sufficient, but not necessary, to meet the limitation, and held that" "generally parallel' envisions some amount of deviation from exactly parallel." Anchor Wall, 340 F .3d at 1311.

FN6. The Court addresses CAT's argument that this construction renders the claims indefinite in Part V.A.

2. CAT argues that the use of the word "having" in the independent claims should be construed as denoting a closed element with respect to the claim limitations "gas separation device" in claim 1 of the '652 Patent, "gas processing device" in claim 11 of the '652 Patent and claim 6 of the ' 222 Patent, and "oxygen-extraction device" in claim 1 of the '222 Patent. However, these claims all include "comprising" as a transitional phrase, which creates a presumption that the body of the claim is open. *See* Crystal Semiconductor Corp. v. TriTech Microelectronics Int'l, Inc., 246 F.3d 1336, 1348 (Fed.Cir.2001). In response, CAT only points to cases where the use of "having" as a transitional phrase has been construed as a closed element under certain circumstance. *See, e.g.,* Enzo Biochem, Inc. v. Applera Corp., No. 3:04cv929, 2006 WL 2927500, at (D.Conn.2006). However, these cases are inapposite because in this case "having" is not used as a transitional phrase. Therefore, with respect to these claim limitations, the Court construes "having" as denoting an open element. *See* KCJ Corp. v. Kinetic Concepts, Inc., 223 F .3d 1351, 1356 (Fed.Cir.2000) ("[The Federal Circuit] has repeatedly emphasized that an indefinite article 'a' or 'an' in patent parlance carries the meaning of 'one or more' in open-ended claims containing the transitional phrase 'comprising.' ").

3. CAT argues that the term "reduced-oxygen gas mixture" in claim 11 of the ' 652 Patent requires that only oxygen be removed from air to produce hypoxic gas. Hypoxico argues that this term should not be construed to require the removal of only pure oxygen. The patents-in-suit teach the use of membrane separation or pressure swing adsorption technology to generate hypoxic gas. ('652 patent, col. 1, l. 66-col. 2; '222 patent, col. 2, ll. 33-36.) The ordinary meaning of "reduced-oxygen" would not require the removal of pure oxygen, but rather that the resultant gas has a lower oxygen concentration. There is also nothing in the

specification that indicates that the term should be construed to require the removal of pure oxygen. In fact, the '652 Patent indicates that this technology may not result in the production of pure oxygen, but rather somewhere in the range of 80-90% purity. ('652 patent, col. 7,l. 32-34.)

CAT offers no evidence that one skilled in the art would have understood this term to require the extraction of only oxygen. In fact, Dr. James Ritter, an expert witness for CAT, testified in his deposition that the '652 and '222 Patents use technology that would not be capable of removing only oxygen, and in fact that to his knowledge a physical adsorbent or membrane that extracts only oxygen did not exist at the time the patents were filed. (Ritter Dep. 218-229, 243-244, 277-78.) Therefore, the Court construes this term to teach the reduction of oxygen from the air without a limitation that only oxygen be removed from the air in order to create hypoxic gas. For the same reasons, the Court will apply the same construction to the terms "reduced oxygen", "oxygen-extraction device", and "oxygendepleted air" in claim 1 of the '222 Patent and "oxygen-depleted gas mixture" in claim 6 of the '222 Patent.

4. CAT argues that "closed space" as used in claim 11 of the '652 Patent should be construed as requiring that the structure be airtight except for the door opening and apertures described elsewhere in the claim. CAT argues that "closed space" must mean something different than "internal space" which is used in claim 1, and that the inclusion of apertures in claim 11 indicates that such apertures must be the only means by which air can communicate between the inside and outside of the chamber. Hypoxico argues that "closed space" means the "space inside the tent".

The Court agrees with CAT to the extent that the term "closed space" requires that the chamber described in claim 11 have no visible openings aside from the apertures and the door opening. However, the ordinary meaning of "closed space" does not include a limitation that the space be airtight, and there is no basis to read such a limitation on the term as it is used in claim 11.

Furthermore, with respect to the remaining disputed terms in claim 11 of the ' 652 Patent, the Court construes "door" to mean a movable barrier by which an entry is closed and opened, and "wall structure" to require that the chamber include sides connecting the bottom and top of the chamber. *See* Webster's Third New International Dictionary 674 (def. 1 a), 2572 (def.1(2)) (1993) ("Webster's"). There is nothing the in the claim language or the specification that indicates that "door" should be limited to something "solid ... hinged to or sliding on a frame," as suggested by CAT.

5. CAT's proposed construction for "vent" in claim 4 of the '652 Patent is "a small opening that allows gas to escape." Hypoxico proposes that vent means "an opening." The Court construes vent to mean "an opening for the escape of a gas," consistent with its ordinary meaning. *See* Webster's 2541 (def.4(2b)).

6. CAT also argues that the '652 Patent cannot be construed to encompass any systems not used in rooms and/or any uses other than active training or therapy.FN7 However, the "patentability of apparatus or composition claims depends on the claimed structure, not on the use or purpose of that structure," because "[t]he inventor of a machine is entitled to the benefit of all the uses to which it can be put, no matter whether he had conceived the idea of the use or not." Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 809 (Fed.Cir.2002) (internal citation and quotation marks omitted). CAT does not point to any language of the asserted claims themselves to suggest that the claims should be limited to use in rooms or for active training or therapy. Rather, CAT bases its proposed construction on the use of the terms "room" and "hypoxic training or therapy" in the title and abstract of the ' 652 Patent. This is plainly insufficient to read in a use limitation on the invention disclosed in the ' 652 Patent. CAT's reliance on the prosecution

history of the ' 222 Patent is also insufficient to read such a limitation on the ' 652 Patent. Therefore, the Court finds that "room" and "training or therapy" are not limitations on the ' 652 Patent. To the extent CAT argues that the ' 652 Patent does not cover the tent systems sold by CAT, this goes to the question of infringement rather than construction.

FN7. At argument of the current motion, Hypoxico clarified that it was not arguing that CAT's room systems infringe the asserted claims of the '222 Patent.

C.

1. CAT argues that "naturally existing gaps and fabric pores" in claim 1 of the '222 Patent should be construed as "openings in a solid structure present in or produced by nature, and minute openings in cloth made from woven, knitted, or felted thread or fibers." Hypoxico suggests "gaps that are formed during the construction of the tent, such as around zippers or other closing mechanisms as an inherent result of the construction of the tent and openings in fabric used in the construction of the tent." The Court construes the term "naturally occurring gaps" as contended by Hypoxico, in view of the specification which defines "naturally existing gaps" to include those that "exist around the zipper or other closing mechanism of entryway ...." ('222 patent, col. 2, ll. 45-49.) The Court construes "fabric" as "a material that resembles cloth, such as parachute nylon or synthetic material such as clear vinyl." ('222 Patent, col. 2, ll. 1-3;) *see also* Webster's 811 (def.1(5d)). The Court construes "fabric pores" as "minute openings in the fabric". *See* Webster's 1766 (def.2(1a)).

2. CAT argues that the use of "at rest" in the preamble of claim 1 of the ' 222 Patent should be read as a limitation on claim 3 of the '222 Patent which is dependant on claim 1. Whether the preamble should be read as a limitation on a claim "can be resolved only on review of the entirety of the patent to gain an understanding of what the inventors actually invented and intended to encompass by the claim." Corning Glass Works v. Sumitomo Elec. U.S.A., Inc., 868 F.2d 1251, 1257 (Fed.Cir.1989); *see generally* Poly-America, L.P. v. GSE Lining Technology, Inc., 383 F .3d 1303, 1309-10 (Fed.Cir.2004). "No litmus test defines when a preamble limits claim scope." Catalina Mktg., 289 F.3d at 808.

A preamble is a claim limitation if "it recites essential structure or steps, or if it is 'necessary to give life, meaning, and vitality' to the claim. On the other hand, a preamble is not limiting 'where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.' " Poly-America, 383 F.3d at 1309-10 (citations omitted). In making this determination, the Court should consider the entire patent record, including the specification and the prosecution history. *See* Rowe v. Dror, 112 F.3d 473, 478 (Fed.Cir.1997) (collecting cases).

In this case, the Court concludes that "at rest" and "for sleeping" are suggested uses of the inventions rather than limitations on the body of the claims. The inventions as defined in the body of the claims are structurally complete and "deletion of the preamble phrase does not affect the structure or steps of the claimed invention." Catalina Mktg., 289 F.3d at 809. The preamble itself on which CAT places great emphasis describes the invention as follows: "Hypoxic tent system represents a portable travel version of Hypoxic Room System and is designated *mostly* for passive hypoxic training of athletes during rest" (emphasis added). ('222 Patent, Preamble.) Furthermore, there is insufficient evidence to establish that "the applicant clearly and unmistakably relied on those uses or benefits to distinguish prior art." Catalina Mktg., 289 F.3d at 809.

3. CAT argues that the inclusion of "travel" in "portable travel system" as used in claim 6 requires that the system be intended to be used during travel. Because "the patentability of apparatus or composition claims depends on the claimed structure, not on the use or purpose of that structure," *Catalina Mktg.,* 283 F.3d at 809, the Court does not accept CAT's proposed construction. Instead, the Court construes the inclusion of "travel" to require that the system be sufficiently portable to be used in travel, which is consistent with its ordinary meaning and the specification, which does not require that the system be intended for travel.

4. CAT argues that "soft walls" as used in claim 6 are "structures that are malleable, foldable, and easily shaped, and which form a vertical surface of a room or building." Hypoxico argues that "soft walls" simply means "non-rigid structures." The Court concludes that "soft walls," consistent with its plain meaning and the specification, should be construed to require that the walls of the tent, which are supported by the supporting structure, be malleable and foldable. This is consistent with the limitation in claim 6 that the system be portable. *See also* Webster's 2165 (def.1(11a)).

5. CAT argues that claim 6 of the '222 Patent requires the "outlet" to be inside the "closed space". However, CAT misreads the plain meaning of the limitation, which states that the gas-processing device has an "outlet ... transmitting oxygen-depleted gas mixture through said outlet inside said closed space." ('222 Patent, col. 3, ll. 26-29.) This claim limitation does not require that the outlet itself be inside the closed space, but rather that the gas-processing device have an outlet that transmits the hypoxic gas into the closed space.

6. The parties also dispute the construction of "soft synthetic or natural material" as used in claim 3 of the '222 Patent. Claim 3 is dependent on claim 1, and therefore requires that the "fabric" used is a "soft synthetic or natural material." Based on the construction of "fabric" discussed above, no further construction of this term is necessary.

7. The parties have raised additional arguments which they argue are issues of claim construction. However, many of these arguments actually are disputes as to whether the accused products infringe the asserted claims, rather than the correct construction of the asserted claims.FN8

FN8. For example, there does not appear to be any dispute as to the proper construction of claim 17 of the '222 Patent. However, the parties do dispute whether CAT's products infringe claim 17.

V.

Having construed the claims, the Court now turns to whether CAT has raised genuine issues of material fact with respect to the invalidity or unenforceability of the patents-in-suit. Hypoxico moves for summary judgment, arguing that CAT will not be able to prove its contentions that the '652 and the '222 patents are invalid and unenforceable. Patents are presumed to be valid. 35 U.S.C. s. 282. To overcome the presumption of validity, the party challenging a patent's validity must demonstrate its invalidity by clear and convincing evidence. *See* United States v. Telectronics, 857 F.2d 778, 785 (Fed.Cir.1988) ("A patent is presumed valid, and the burden of proving invalidity ... rests with the challenger. Invalidity must be proven by facts supported by clear and convincing evidence.")); *see also* North Am. Vaccine, Inc. v. Am. Cyanamid Co., 7 F.3d 1571, 1579 (Fed.Cir.1993).

A.

CAT has asserted that the patents-in-suit are invalid for failure to comply with the definiteness requirement of 35 U.S.C. s. 112 para. 2 .FN9 To be valid, a patent must include a specification that concludes "with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. s. 112, para. 2. Determining whether a claim satisifies this "definiteness requirement" is a question of law. *See* Hoffer v. Microsoft Corp., 405 F.3d 1326, 1328 (Fed.Cir.2005); Personalized Media Commc'ns, LLC v. Int'l Trade Comm'n, 161 F.3d 696, 705 (Fed.Cir.1998); North Am. Vaccine, 7 F.3d at 1579. A patent satisfies the definiteness requirement if a person skilled in the art would understand what is claimed when the claim is read in light of the specification. BJ Servs. Co. v. Halliburton Energy Servs., Inc., 338 F.3d 1368, 1372 (Fed Cir.2003); *see also* Personalized Media Commc'ns, 161 F.3d at 705. A claim is not indefinite unless it is "insolubly ambiguous." Bancorp Servs., L.L.C. v. Hartford Life Ins. Co., 359 F.3d 1367, 1371 (Fed.Cir.2004).

FN9. At oral argument on the motion, CAT stated that it was not making an argument that the asserted claims were invalid under 35 U.S.C. s. 112 para. 1 for failure to comply with the written description or enablement requirements. In any event, CAT has failed to raise a genuine issue of material fact with respect to any enablement or written description defenses, because there is no evidence that the patents failed to teach a person skilled in the art to make and use the claimed invention. In re Cortright, 165 F.3d 1353, 1356 (Fed.Cir.1999).

CAT bears the burden to show by clear and convincing evidence that the patents-in-suit are invalid for indefiniteness. Telectronics, 857 F.2d at 785; *see also* North Am. Vaccine, 7 F.3d at 1579. Therefore, summary judgment on this issue is appropriate if Hypoxico demonstrates that CAT has failed to raise a genuine issue of material fact as to whether the claims are indefinite under 35 U.S.C. s. 112 para. 2.

CAT first argues that "pressure generally equalized with the ambient air pressure of the external atmospheric environment" in claim 1 of the '652 patent, "pressure substantially equal to the external ambient air pressure" in claim 11 of the '652 patent, and "allowing excess air to escape said internal space and equalizing atmospheric pressure inside said tent to the outside parameter" in claim 1 of the '222 patent are indefinite. The Court has construed these terms to require that the air pressure on the interior and the exterior of the system be "close to but not necessarily the same as the ambient air pressure." "A sound claim construction need not purge every shred of ambiguity," and CAT offers only the conclusory statements of counsel in support of its argument that one skilled in the art would not understand the terms as construed by the Court. Acumed LLC v. Stryker Corp., 483 F.3d 800, 806 (Fed.Cir.2007); *cf.* Anchor Wall, 340 F.3d at 1310-11 ("[W]ords of approximation, such as 'generally' and 'substantially,' are descriptive terms commonly used in patent claims to avoid a strict numerical boundary to the specified parameter.") (internal quotation marks and citation omitted); *cf. also* Andrew Corp v. Gabriel Elecs. Inc., 847 F.2d 819, 821-22 (Fed.Cir.1988).

CAT argues that the terms "inlet" ('652 claim 11), "the air therein" ('652 claim 11), "the outside parameter" ('222 claim 1), and "said hypoxic tent" ('222 claim 3) are indefinite because they lack antecedent bases. However, "[w]hen the meaning of the claim would reasonably be understood by persons of ordinary skill when read in light of the specification, the claim is not subject to invalidity upon departure from the protocol of 'antecedent basis.' " Energizer Holdings, Inc. v. Int'l Trade Comm'n, 435 F.3d 1366, 1370 (Fed.Cir.2006). CAT offers no evidence as to what ambiguity was introduced by the lack of any antecedent basis or why a person skilled in the art would be unable to reasonably understand these claims. In other words, CAT has failed to raise a genuine issue of material fact that "[t]he missing antecedent clause, the absence of which was not observed ... by the examiner of the original patent," failed "to inform the public ...

of the limits of monopoly asserted." Slimfold Mfg. Co., Inc. v. Kinkead Inds., Inc., 810 F.2d 1113, 1117 (Fed.Cir.1987) (internal quotation marks and citation omitted).

CAT argues that the term "vents with apertures" in claim 5 of the ' 652 Patent is indefinite. Claim 4 of the '652 Patent, which is dependent on claim 1, requires "vents providing for flow of air between said external atmospheric environment and said internal space." ('652 Patent, col. 10, ll. 21-23.) Claim 5, which is dependent on claim 1, requires the vents in limitation of claim 4 to have "apertures therein through which air can flow in either direction between said internal space and said external atmospheric environment." ('652 Patent, col. 10, ll. 25-27.) Claim 5 simply adds a limitation on claim 4 that the flow of air be capable of flowing in either direction. This limitation plainly would not be insolubly ambiguous to a person skilled in the art.

CAT next argues that "the tent is substantially isolated from the outside environment" in claim 6 of the '222 patent is indefinite. The Court construes "substantially isolated" to require that the tent be enclosed, but not completely enclosed such that air cannot escape from the tent. This construction is consistent with the specification, which requires that the tent be sufficiently enclosed to maintain an hypoxic atmosphere inside the tent, but also requires that the air be permitted to exit the tent. ('222 Patent, col. 2, ll. 33-50.) For substantially the same reasons as discussed above, the use of the modifier "substantially" does not render this claim indefinite. CAT offers no evidence why such a limitation would be insolubly ambiguous to one skilled in the art.

With respect to its remaining arguments that the claims are indefinite, CAT has failed to raise a genuine issue. With respect to some of the claim limitations that it had previously contended were indefinite in its proposed constructions (Def.'s 56.1 St. Ex. A), CAT has failed to respond to Hypoxico's arguments in support of the motion. In any event, CAT does not offer sufficient evidentiary support to raise a genuine issue of fact with respect to its burden to show that the contested terms are "insolubly ambiguous" and could not be reasonably understood by one skilled in the art. CAT merely submits conclusory statements that these terms are indefinite. (*See* Def.'s Invalidity Contentions, Pl.'s Ex. 23 at App'x B.) CAT fails to point to any portion of Dr. Ritter's report or deposition testimony where he identified any term in the asserted claims that he found indefinite. This is insufficient to raise a genuine issue of material fact. *See* Biotec Biologische Naturverpackungen GmbH & Co. KG v. Biocorp, Inc., 249 F.3d 1341, 1353 (Fed.Cir.2001).

B.

CAT also argues that the patents-in-suit are invalid because the claims are obvious under 35 U.S.C. s. 103(a), which provides:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

35 U.S.C. s. 103(a); *see also* Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 14 (1966). "Obviousness is a legal question based on underlying factual determinations including: (1) the scope and content of the prior art, including what that prior art teaches explicitly and inherently; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness." In re Zurko, 258 F.3d 1379, 1383-84 (Fed.Cir.2001) (citing Graham,

383 U.S. at 17-18).

To establish obviousness, a party must explain how a person skilled in the art would have understood how to combine or modify the references in the prior art to create the invention as claimed, and the benefit in doing so. KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1739-41 (2007). "A court must ask whether an improvement is more than the predictable use of prior-art elements according to their established functions." Id. at 1740. Because CAT bears the burden to show by clear and convincing evidence that the patents-in-suit are invalid for obviousness, Hypoxico is entitled to summary judgment on this issue if it demonstrates that CAT has failed to raise a genuine issue of fact as to whether the claims are obvious under 35 U.S.C. s. 103.

CAT argues that the '652 Patent was obvious in view of references including U.S. Patent Nos. 5,101,819 ("Lane") and 5,207,623 ("Tkatchouk"), and certain European publications.FN10 CAT argues that the ' 222 patent was obvious in view of these references, as well as U.S. Patent No. 4,853,598 ("Griesenbeck").

FN10. At oral argument, CAT withdrew its contention that the "Finnish High Altitude Camp Reference" (Ex. 25) was prior art with respect to the patents-in-suit.

Hypoxico argues that the '857 Patent is not prior art to the '222 Patent because the '222 Patent, as a CIP of the '652 Patent, can rely on the filing date of the application that became the '652 Patent, July 21, 1995, for priority. CAT argues that the asserted claims in the '222 Patent is new matter that was not disclosed in the prior applications, and that therefore the priority date for the '222 Patent is December 3, 1997, which is after May 13, 1996, the effective date of the '857 Patent for the purposes of 35 U.S.C. s. 102(e).FN11 However, the Court need not resolve this issue, because even accepting the ' 857 Patent as prior art for the ' 222 Patent, CAT has failed to create a genuine issue of material fact with respect to whether the patents-in-suit are invalid for obviousness.

FN11. CAT conceded at the argument of the motion that the '857 Patent was not prior art with respect to the '652 Patent.

As an initial matter, CAT has provided no evidence that the elements of asserted claims 13 and 17-19 of the '652 Patent are found in any of the asserted prior art. (Pl.'s 56.1 St. 113-114; Def.'s 56.1 St. 113-114.) With respect to the other asserted claims, CAT simply summarizes some of the prior art and argues that these references are similar to certain aspects of the claimed inventions. The only evidence CAT offers is the report of Dr. Ritter. Dr. Ritter's report merely recites the limitations of the asserted claims and identifies where he believes such limitations can be found in the cited references. However, "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." KSR, 127 S.Ct. at 1741. CAT does not offer any "articulated reasoning with some rational underpinning" as to why a person skilled in the art would have understood how to combine or modify the references in the prior art and create the claimed inventions and the benefit in doing so. *Id*. (quoting In re Kahn, 441 F.3d 977, 988 (C.A.Fed.2006)); *see generally* Innogenetics, N.V. v. Abbott Labs., 512 F.3d 1363, 1373-74 & n. 3 (Fed.Cir.2008); *see also* Biotec, 249 F.3d at 1353 ("It is not the trial judge's burden to search through lengthy technologic documents for possible evidence. The public interest in invalidating invalid patents does not override the well established procedure requiring the nonmovant to come forward with evidence sufficient to negate the movant's position."). Based on this

record, the Court finds that CAT has failed to raise a genuine issue of material fact with respect to whether the claims in the '652 and '222 Patents are invalid for obviousness.

C.

Lastly, CAT argues that the patents-in-suit are unenforceable due to the alleged inequitable conduct of Mr. Kotliar in withholding information from the United States Patent and Trademark Office ("PTO"). CAT alleges that Mr. Kotliar withheld information concerning (1) a European patent application (the "EP '799 application"); (2) an associated sales brochure; and (3) the identity of and facts relating to the participation by Mr. Wallace in the invention covered by the '222 patent. Hypoxico urges that summary judgment be granted finding that these alleged instances of inequitable conduct are not a basis for invalidating the patents.

Patent applicants owe a duty of candor and good faith to the PTO. M. Eagles Tool Warehouse, Inc. v. Fisher Tooling Co., Inc., 439 F.3d 1335, 1339 (Fed.Cir.2006) (citing 37 C.F.R. s. 1.56(a)). Breaching this duty constitutes inequitable conduct which may render the patent unenforceable. Id. at 1340. A party alleging that inequitable conduct has been committed must prove both materiality of the conduct and deceptive intent by clear and convincing evidence, "with a greater showing of one factor allowing a lesser showing of the other." Digital Control, Inc. v. Charles Machine Works, 437 F.3d 1309, 1313 (Fed.Cir.2006) (quotation marks and citation omitted). If this burden is met, the Court must weigh the evidence of materiality and intent in light of all of the circumstances to determine whether the conduct is so culpable that the patent should be held unenforceable. *See* Dayco Prods., Inc. v.. Total Containment, Inc., 329 F.3d 1358, 1362-63 (Fed Cir.2003).

Information is "material" to patentability when:

it is not cumulative to information already of record or being made of record in the application, and (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) It refutes, or is inconsistent with, a position the applicant takes in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability.

37 C.F.R. s. 1.56(b). The Court of Appeals for the Federal Circuit has held that this rule, which was amended in 1992, was not intended to supplant the "reasonable examiner" standard previously applied to the question of materiality. *See* Digital Control, 437 F.3d at 1316. Under this standard, materiality requires "a showing that a reasonable examiner would have considered such [information] important in deciding whether to allow the parent application." Dayco Prods., 329 F.3d at 1363 (internal quotation marks and citation omitted).

"In determining whether the misstatements were intentional, 'the involved conduct, viewed in light of all the evidence, including evidence of good faith, must indicate sufficient culpability to require a finding of intent to deceive.' ... Intent need not be shown by direct evidence, but may be inferred from the totality of the evidence." Digital Control, 437 F.3d at 1319 (quoting Paragon Podiatry Lab., Inc. v. KLM Labs., Inc., 984 F.2d 1182, 1189 (Fed.Cir.1993) (citation omitted)). Although summary judgment can be granted on the issue of inequitable conduct, the Court of Appeals for the Federal Circuit "urges caution" in making an inequitable conduct determination at the summary judgment stage. M. Eagles Tool Warehouse, Inc., 439 F.3d at 1340.

1.

CAT first argues that the patents are invalid for failure to disclose the EP '799 application. However, CAT has failed to raise a genuine issue of material fact that the EP '799 application was material or that Mr. Kotliar had an intent to deceive the PTO. CAT has not offered any evidence as to why the EP '799 application was material to patentability, aside from a conclusory statement from one of its experts, Mr. Dewhirst, that the EP '799 application was material. However, Mr. Dewhirst admitted that he never read the EP '799 application in detail and did not analyze whether it was material. Therefore his opinion as to whether it was a material reference or whether it was cumulative to the prior art of record is speculative. (Dewhirst Dep. 53-58.) With respect to intent, the written record reveals that Mr. Kotliar disclosed the EP '799 application in the application for the '652 Patent and explained its relevance to the prior art. (Pl.'s Ex. 12 at 10.) Furthermore, Mr. Kotliar submitted a non-English copy of the EP '799 application to the PTO. (Pl.'s Ex. 12 at 63.) Although the examiner rejected the submitted application for failure to provide a concise statement with a non-English document (Pl.'s Ex. 12 at 67), there is no evidence that Mr. Kotliar withheld the EP '799 application with deceptive intent.FN12 *See* Multiform Desiccants, Inc. v. Medzam, 133 F.3d 1473, 1482 (Fed.Cir.1998) ("Although direct evidence of fraudulent intent is not easy to come by, inference without any probative evidence is insufficient to show culpable intent.") Based on this record, no reasonable jury could conclude that CAT had established inequitable conduct by clear and convincing evidence based on the alleged withholding of the EP '799 Patent.

FN12. The parties dispute whether the examiner was correct in rejecting the non-English copy of the EP '799 application based on the rules in effect at the time. However, the Court need not reach this issue. It would be incredible to find that there was an intent to deceive by submitting a foreign language document to the PTO with the expectation that a proper translation would not be requested or otherwise obtained.

2.

Similarly, CAT has failed to raise a genuine issue of material fact in connection with the alleged non-disclosure of a sales brochure. There is insufficient evidence in the record that the brochure was either material or that Mr. Kotliar had an intent to deceive the PTO. CAT again relies on the opinion on Mr. Dewhirst, but Mr. Dewhirst never read the sales brochure. CAT offers no analysis of the relevance of the sales brochure with respect to the asserted claims or the prior art references that were before the examiner. *See* Dayco Prods., 329 F.3d at 1367. There is also insufficient evidence that Mr. Kotliar possessed the sales brochure at the time that he filed the applications in issue or that he withheld it with deceptive intent. *See* Multiform Desiccants, 133 F.3d at 1482.

3.

Lastly, CAT argues that the '222 Patent is unenforceable on the grounds that Mr. Kotliar failed to disclose the contributions of Mr. Wallace to the claimed invention. The parties do not dispute that inventorship is a requirement of patentability and therefore is material. *See* PerSeptive Biosystems, Inc. v. Pharmacia Biotech, Inc., 225 F.3d 1315, 1321 (Fed.Cir.2000) (citing 35 U.S.C. s.s. 102(f)) (noting that Section 2004 of the Manual of Patent Examining Procedure ("MPEP") states that questions about inventorship should be brought to the attention of the PTO).

Hypoxico argues that there is a lack of corroborating evidence sufficient to raise a genuine issue of material fact with respect to inventorship. However, the issue is not whether the '222 Patent is invalid under 35

U.S.C. s. 102(f), but rather whether it is unenforceable for inequitable conduct. "[W]hether the inventorship of the patents as issued is correct does not determine the materiality of the statements [made to the PTO], just as whether concealed prior art would actually invalidate the patent is irrelevant to materiality." Id. at 1322. That is because "the issue is not inventorship per se, but misinformation about inventorship." Id. Therefore, the focus of the inquiry is whether there is a genuine issue of material fact with respect to materiality and intent to deceive.

In his affidavit FN13, Mr. Wallace states that in 1997 he met with Mr. Kotliar and discussed his plans to construct a "personal, portable sleeping chamber system that would simulate altitude conditions for athletes." (Wallace Aff. para.para. 3-4.) Mr. Wallace further states that at this meeting he shared details of his system, and that within a month Mr. Kotliar traveled to Pennsylvania and spent two hours discussing and viewing the prototypes that Mr. Wallace was constructing. (Wallace Aff. para.para. 5-10.) Mr. Serrano has also submitted an affidavit in which he states that he was present at the July 1997 meeting and that he remembers Mr. Kotliar's trip to Pennsylvania in the summer of 1997. (Serrano Aff. para.para. 3, 5.)

FN13. For the reasons discussed in Part VIII, infra, Hypoxico's motion to strike the affidavit of Mr. Wallace is denied.

This evidence is sufficient to raise a genuine issue of material fact as to whether Mr. Kotliar failed to disclose Mr. Wallace's contributions to the invention claimed in the '222 Patent with an intent to deceive the PTO. Viewing the evidence in the light most favorable to CAT, a reasonable examiner would have found this information to be important in deciding whether to allow the patent application.

Hypoxico argues that Mr. Wallace did not contribute anything to the '222 Patent that was not found in the '652 Patent. As an initial matter, this argument again confuses the question of whether the '222 Patent is invalid under Section 102(f) with the question of whether the '222 Patent should be unenforceable for inequitable conduct before the PTO. In any event, the record plainly creates an issue of fact as to whether Mr. Wallace's contributions added new matter to the '222 Patent that is not taught by the '652 Patent.

VI.

Having previously construed the claims, the Court now turns to the second step of the infringement analysis. Hypoxico bears the burden of proof with respect to infringement, and is therefore entitled to summary judgment only if no genuine issue of material fact remains as to whether the accused products infringe the asserted claims.

On the present record, summary judgment on the issue of infringement should not be granted. Hypoxico relies on the expert report of Dr. Rhodes, in which he concludes that all systems that have been sold by CAT infringe the asserted claims of the '652 Patent, and that all tent systems that have been sold by CAT infringe the asserted claims of the '222 Patent. However, Hypoxico does not even attempt to present evidence of this assertion, and certainly does not present sufficient evidence to be entitled to summary judgment as a matter of law. Instead, Dr. Rhodes lists the limitations of the asserted claims and asserts infringement, but only points to individual elements of representative samples of CAT's products that he claims infringe on each limitation. (Pl.'s Ex. 17 and 34.) Dr. Rhodes does not identify the particular systems that he believes infringe each of the asserted claims.

CAT has submitted an affidavit from Mr. Kutt, CAT's president, in which he states that CAT has built and continues to build a variety of tent and room systems with different characteristics.FN14 (Kutt Aff. para.para. 5, 10.) Hypoxico argues that CAT represented that certain systems were typical of CAT's products, and that these systems do infringe, and that therefore it is entitled to summary judgment on infringement.FN15 Viewing this evidence in the light most favorable to CAT, because Hypoxico has not clearly specified which specific products infringe which specific claims, a genuine issue of material fact remains with respect to the structure and operation of the accused products. Under these circumstances, the question of literal infringement is not amenable to summary judgment. *See, e.g.,* Omega Engineering, Inc. v. Raytek Corp., 334 F.3d 1314, 1329 (Fed.Cir.2003); *see also* Pfaff v. Wells Electronics, Inc., 5 F.3d 514, 519 (Fed.Cir.1993) (reversing grant of summary judgment of noninfringement on the grounds of literal infringement where there was a disputed material factual issue whether the accused devices met an asserted claim limitation).

FN14. For the reasons discussed in Part VII, *infra,* Hypoxico's motion to strike the affidavit of Mr. Kutt and the attachment thereto is denied.

FN15. Hypoxico requests that the Court grant summary judgment finding that CAT has literally infringed the asserted claims, without specifying which of the accused products infringe which claims. Hypoxico argues CAT's argument that not all of its systems infringe the asserted claims is an issue of damages. However, Hypoxico's approach would effectively shift the burden on CAT, the non-movant, to prove non-infringement of certain of its products.

There are plainly genuine issues of material fact as to whether, as Hypoxico argues, all of CAT's systems infringe all of the asserted claims of the '652 Patent and all of CAT's tent systems infringe all of the asserted claims of the '222 Patent. Hypoxico's claims of literal infringement should therefore be presented to the jury, particularly in light of the fact that Hypoxico is not moving for summary judgment with respect to all of the claims of the '652 or '222 Patents which it claims were infringed.

VII.

Hypoxico also moves for summary judgment on Count IV of CAT's counterclaims, in which CAT alleges that Hypoxico is liable for infringement of the '857 patent. Hypoxico specifically asks the Court to find that its products do not infringe claim 1 of the '857 Patent, which claims:

1. A method for regulating an atmosphere in a substantially closed space on ground level, comprising the steps of supplementing a normal atmosphere of said space with nitrogen or with a mixture of nitrogen and oxygen, the supplement of nitrogen or said mixture in said normal atmosphere being used to create a desired low-oxygen atmosphere, said low-oxygen atmosphere corresponding to partial oxygen pressure in the air at a certain altitude above sea level, in which method said mixing of nitrogen or said mixture of nitrogen and oxygen with air is carried out at local ambient air pressure.

A.

Hypoxico argues that the term "mixture of nitrogen and oxygen" as used in claim 1 of the '857 Patent should be construed to require supplementation of the atmosphere with "a gas mixture consisting exclusively of substantially pure nitrogen and substantially pure oxygen, to the exclusion of any other gases, except in

trace amounts." CAT responds that the term should be construed as "a mixture containing oxygen and nitrogen." Hypoxico similarly argues that the term "nitrogen" should be limited to "substantially pure nitrogen (95% or better) with only trace amounts of other gases." CAT responds that this term should be construed as "the element nitrogen."

The Court agrees with the construction asserted by CAT, and finds that the '857 Patent is not limited to supplementation by pure or substantially pure nitrogen or oxygen. Because the '857 Patent is a method patent, the claims of the patent are not limited by the embodiments listed in the written description. *See* Toro Co. v. Deere & Co., 355 F.3d 1313, 1319-20 (Fed.Cir.2004). There is nothing in the claim language, the specification, or the prosecution history that establishes that the use of these terms was so limited.FN16

FN16. The arguments made by Hypoxico with respect to the prosecution history of the '222 Patent do not establish that a "mixture of nitrogen and oxygen" should be limited to substantially pure nitrogen and oxygen.

Hypoxico is correct to the extent it argues that "a mixture containing oxygen and nitrogen" must be distinguished from "premixed air having a desired oxygen content", because both of these terms are used in claim 2 of the '857 Patent. Claim 2 of the '857 Patent suggests a two-step method of creating and maintaining a hypoxic atmosphere, where the "mixture containing oxygen and nitrogen" is blown into the space in order to lower the oxygen content of the atmosphere, after which "pre-mixed air having a desired oxygen content" is blown into the space to adjust and maintain the hypoxic atmosphere. Presumably, the oxygen content of the hypoxic gas used in each step would differ. This construction does not require that the "mixture of nitrogen and oxygen" be composed only of substantially pure nitrogen mixed with substantially pure oxygen.FN17

FN17. Furthermore, contrary to Hypoxico's argument, claim 1 of the ' 857 patent teaches the supplementation of "a normal atmosphere ... with nitrogen or with a mixture of nitrogen and oxygen ... to create a desired low-oxygen atmosphere," without any additional steps. ('857 Patent, col. 5, ll. 1-7.)

B.

Having construed the asserted claims of the '857 patent not to be limited to supplementation by pure or substantially pure nitrogen or oxygen, the Court could not find that Hypoxico is entitled to summary judgment on the issue of whether Hypoxico's products infringe claim 1 of the '857 patent. Hypoxico's sole argument in support of summary judgment was based on its proferred construction of the asserted claim.FN18 The question of whether the method of supplementation used in Hypoxico's products infringes the ' 857 patent is therefore a question for the jury.

FN18. At oral argument on the motion, Hypoxico conceded that if the Court construed the '857 patent to teach supplementation using less than pure nitrogen or oxygen, than the question of infringement would be an issue of fact to be resolved by the jury.

VIII.

Hypoxico has also filed a motion in limine, which seeks an order (1) precluding CAT from asserting any

non-infringement defense not fully set forth in response to Hypoxico's contention interrogatories; (2) striking those portions of the affidavits of Mr. Kutt and Mr. Wallace that refer or relate to any information not previously produced; and (3) precluding the use by CAT of the exhibits attached to the affidavits of Mr. Kutt and Mr. Wallace. Hypoxico argues that the evidence submitted in response to the motion for summary judgment goes beyond evidence previously produced and specifically that some of the information should have been produced in response to interrogatories, and that responses to interrogatories should have been supplemented under Federal Rule of Civil Procedure 26(e).

Rule 37(c) (1) of the Federal Rules of Civil Procedure provides, in relevant part:

If a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless.

"[A]lthough a 'bad-faith' violation of the Rule 26 is not *required* in order to exclude evidence pursuant to Rule 37, it can be taken into account as part of the party's explanation for its failure to comply." Design Strategy, Inc. v. Davis, 469 F.3d 284, 296 (2d. Cir.2006).FN19

FN19. The current language of Rule 37(c)(1) was adopted in 2007 but the changes in the language were only stylistic.

The Court has carefully considered the arguments of the parties. On the basis of the current record, the Court could not conclude that CAT engaged in a violation of its discovery obligations under Federal Rule of Civil Procedure 26(e).

Hypoxico asks the Court to preclude CAT from raising certain "non-infringement" defenses not raised in CAT's response to Hypoxico's contention interrogatories.FN20 However, these contention interrogatories were plainly premature when served on CAT, and were never revised or re-served. *See* Local Civil Rule 33.3. Moreover, Hypoxico argues that nearly all of the additional arguments and documents are irrelevant, so the Court could not find that Hypoxico would be prejudiced if the Court denied the motion in limine. FN21

FN20. Hypoxico bears the burden with respect to proving infringement, yet seeks an order precluding CAT from making certain arguments that its products do not infringe.

FN21. The Court notes that to the extent Hypoxico seeks to preclude the exhibits attached to the affidavit of Mr. Wallace, the Court has not relied on the attachments in deciding this motion.

Therefore, preclusion is not appropriate and Hypoxico's motion to strike is **denied.**FN22 However, if Hypoxico believes that it requires additional discovery before trial as a result of the Kutt or Wallace affidavit, it should make an application to the Court for reasonable additional discovery.

FN22. Hypoxico's argument that the Kutt affidavit and its attachment are hearsay is without merit, because Mr. Kutt's statements are based on his personal knowledge. The Court finds that the Kutt affidavit is

admissible for the purposes of this motion.

CONCLUSION

The Court has considered all of the parties' arguments. To the extent not specifically addressed they are either moot or without merit. For the reasons discussed above, the plaintiff's motion for summary judgment is **granted in part** and **denied in part.** The motion is **granted** with respect to CAT'S non-infringement defenses of indefiniteness, obviousness, and inequitable conduct with respect to the alleged non-disclosure of the EP '799 application and the sales brochure. The motion is **denied** with respect to CAT'S defense that Mr. Kotliar's non disclosure of Mr. Wallace's contribution to the invention embodied in the '222 Patent amounted to inequitable conduct. The motion is also **denied** with respect to Hypoxico's claim of literal infringement and Hypoxico's defense of non-infringement of the '857 Patent. Hypoxico's motion to strike is **denied.** The Clerk is directed to close Docket Nos. 70, 82, and 88.

SO ORDERED.

S.D.N.Y.,2008.
Hypoxico, Inc. v. Colorado Altitude Training, LLC