

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
LUFKIN DIVISION**

Anascape, Ltd.,

Plaintiff,

v.

Microsoft Corp., and  
Nintendo of America, Inc.,

Defendants.

Civil Action No. 9:06-cv-158-RC

JURY TRIAL REQUESTED

**ANASCAPE’S OPENING CLAIM CONSTRUCTION BRIEF – PART II**

**PART II – MICROSOFT & NINTENDO-INFRINGED PATENTS**

*U.S. Patent No. 6,222,525*

*U.S. Patent No. 6,906,700*

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- Exhibit 2 '700 Patent File History, 3/11/2003 Amendment
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- Exhibit 5 The New IEEE Standard Dictionary of Electrical and Electronics Terms (5th Ed. 1993) ("potentiometer")
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Anascape, Ltd. (“Anascape”) submits its opening claim construction brief in two parts. This part, Part II,<sup>1</sup> addresses the disputed terms of U.S. Patent Nos. 6,222,525 and 6,906,700, which Anascape asserts against both Defendant Microsoft Corp. (“Microsoft”) and Defendant Nintendo of America, Inc. (“Nintendo”).<sup>2</sup> These two patents are collectively referred to as the “Microsoft & Nintendo-Infringed Patents.”

The first section of this brief provides an explanation of the inventions of the Microsoft & Nintendo-Infringed Patents. The second section addresses applicable claim construction principles relevant to the disputed claim terms, while the last section explains why Anascape’s proposed constructions are consistent with the established principles of claim construction and should be adopted by the Court.<sup>3</sup>

## I. TECHNICAL BACKGROUND

Brad Armstrong is the sole inventor of the ’525 and ’700 patents. He is also the inventor of two earlier patents, U.S. Patent Nos. 5,565,891 and 5,589,828. The ’525 and ’700 patents are continuing applications that claim priority to these earlier ’891 and ’828 patents. The inventions of these four patents arose from Armstrong’s work during 1989 to 1995 in which he conceived and built prototypes of controllers for video game systems, computers, and other electronic devices. His work – and the work of his company, Anascape – resulted in joint venture

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<sup>1</sup> Part I addressed the disputed terms of U.S. Patent Nos. 5,999,084; 6,102,802; 6,135,886; and 6,343,991. Anascape asserts those four patents against Defendant Microsoft Corp.; they are collectively referred to as the “Microsoft-Infringed Patents.”

<sup>2</sup> Each of the patents-in-suit will be referenced by the last three digits of the patent number. For example, U.S. Patent 5,999,084 will be referred to herein as the ’084 patent.

<sup>3</sup> Since filing their revised P.R. 4-3 statement on May 1, 2007, the parties have agreed to constructions for two additional terms of the ’700 patent. For the terms, “tactile feedback means for providing vibration” and “tactile feedback vibration in the controller,” Anascape has agreed to adopt Microsoft’s proposed constructions of Exhibit 2 of the revised P.R. 4-3 statement.

development efforts with established companies and led to commercially marketed products. His inventions form the basis of the '525 and '700 patents.

In the '525 and '700 patents,<sup>4</sup> which include 50 figures and 36 columns of text each, Armstrong described a number of embodiments for novel game controllers that featured various improvements over the prior art, including force feedback, improved manufacturing techniques, novel structures for capturing six degrees of freedom, and pressure-sensitive buttons.<sup>5</sup> The various embodiments of the patents – and the claims of the patents – implement these improvements in various combinations. Because of the multiple improvements disclosed by Armstrong, the Patent Office found that controllers including various combinations of the improvements were novel over the prior art. Thus, the claims of the '525 and '700 patents do not require every improvement to be present in every claim. Instead, each of the claims includes a subset of Armstrong's disclosed improvements in game controller design. The improvements are described below.

#### **A. Armstrong Invented Force Feedback in Game Controllers**

In one of his earliest patent applications, the '828 patent, Armstrong first described how force feedback, *i.e.* electro-mechanical vibration, could be employed in game controllers to improve the user's interaction with the game environment. ('828 patent at 2:51-62, attached as Ex. 1.) For example, as a user attempts to pass a video game character through a blockage or make some other illegal movement, the controller gently vibrates in the user's hand, mimicking the physical contact that a user would sense in the real world. (*Id.*)

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<sup>4</sup> The '525 and '700 patents share an almost identical specification. The Patent Office specifically found that the '700 patent was a continuation of the '525 patent and indicated its decision on the first page of the '700 patent.

<sup>5</sup> Because these are the only advancements related to the disputed claim terms of the '525 patent, the technical background does not address the remaining aspects of Armstrong's disclosure.

To implement force feedback, which Armstrong called “active tactile feedback,” Armstrong described how a small electric motor with an offset weight attached to its shaft can produce electro-mechanical vibration. (*Id.* at 9:22-25.) When the motor is activated, the offset weight rotates and creates a vibration felt by the user. This structure is shown in the dashed lines of Figure 21 of the ’700 patent, below.

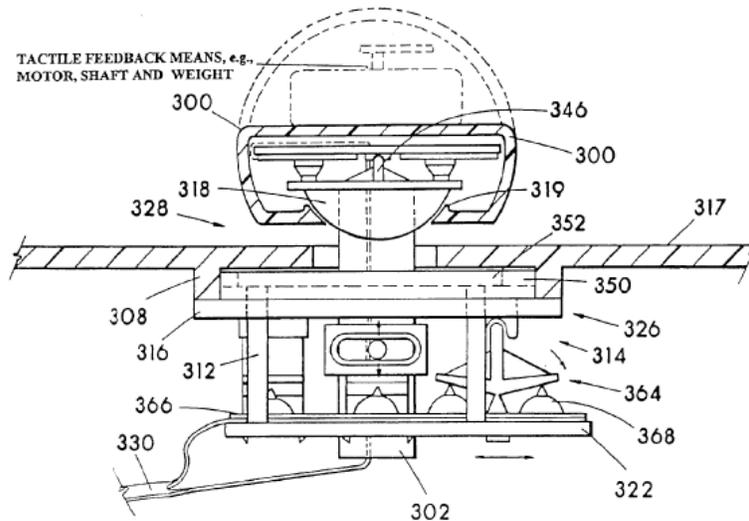


FIG. 21

### B. Armstrong Disclosed Novel Game Controller Manufacturing Techniques

Armstrong recognized that one key failure of prior art game controllers was the inclusion of individual wires and sensors that were hand-installed. ('525 patent at 2:66-3:7.) In addition to the added expense, game controller designs using individual sensors and wiring were difficult to repair and frequently unreliable as a result of breaking wires, defective solder joints, and cross-wiring. (*Id.* at 3:8-24.)

To solve these problems, Armstrong realized that game controllers could benefit from the use of sheet-mounted sensors and circuitry. (*Id.* at 5:15-25.) In particular, Armstrong disclosed that individual sensors and wires could be replaced with flexible membrane sheets or circuit board sheets. (*See, e.g., id.* at 5:5:17-18, 5:35-36.) As Armstrong explained, the flexible

membrane sheets and circuit board sheets of his invention provided the most benefit when they were built to include both sensors and circuitry, but that “[h]and applying of the sensors and associated electrical conductors onto the flat sheet is not outside the scope of the invention.” (’525 patent at 6:3-5.)

### C. Armstrong Invented Novel Structures for Capturing Six Degree of Freedom Inputs

Armstrong described multiple game controller embodiments capable of capturing six degrees of freedom. The term “six degrees of freedom” refers to the six different axes of motion that exist in three-dimensional space. (’525 patent at 4:45-48.) The six degrees include three linear axes – (1) forward/backward, (2) up/down, (3) left/right – and three rotational axes – (1) yaw, (2) pitch, and (3) roll. (*Id.* at 8:49-59; *see also id.* at 21:55-22:34.) These axes are shown in figure 7 of the ’525 patent, which is reproduced to the right. By allowing movement in these six degrees of freedom, a controller becomes more versatile and able to translate complex movements in any possible direction into electrical signals that can be used by a video game system. (*Id.* at 8:49-59.)

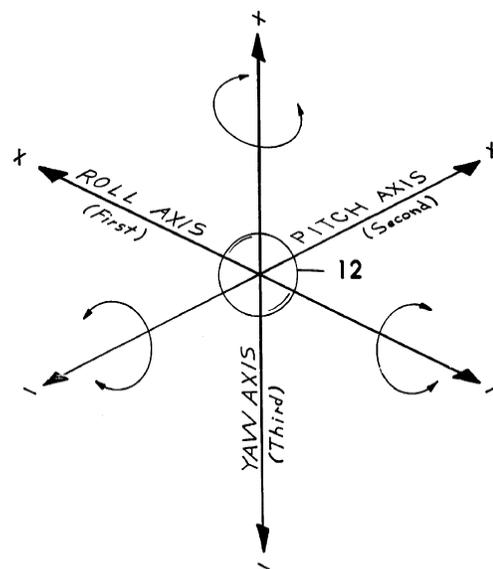


FIG. 7

Some of Armstrong’s controller embodiments used one “input member” to capture all six degrees of freedom, while others split the six degrees of freedom among multiple input members. For example, the embodiment shown in Figures 20-31 of the ’525 patent included a single input member that received inputs in six degrees of freedom. Although Armstrong felt that devices with a single input member provided the best user experience, (*see* ’525 patent at 3:30-32), he

alternatively described game controller embodiments that included multiple input members capable of collectively capturing inputs in six degrees of freedom.<sup>6</sup> For example, the embodiment described in figures 1-6 of the '525 patent uses two input members, a track-ball and a collet. (*Id.* at 12:49-13:7; 17:20-23.)<sup>7</sup>

#### **D. Armstrong Disclosed Pressure-Sensitive Buttons For Use in His Novel Game Controllers**

As described extensively in Part I of Anascape's claim construction brief, Armstrong also described a number of structures for pressure-sensitive variable conductance sensors and structures for interpreting the output of those sensors. In the '525 patent, Armstrong explained how these sensors could be incorporated into game controller embodiments along with various combinations of the other advances described in the patent. ('525 patent at 28:17-29:4.)

## **II. APPLICABLE CLAIM CONSTRUCTION PRINCIPLES**

Claim construction is an issue of law. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). Claim construction begins by inquiring how a person of ordinary skill in the art would understand the claim term at the time of the effective filing date of the patent application. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*). To that end, a court should look first to the patent claims, specification, and prosecution history – the intrinsic evidence – for the meaning of the claim terms. *Id.* at 1313-14. In light of this evidence, the words of a claim “are generally given their ordinary and customary meaning.” *Id.* at 1313.

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<sup>6</sup> In particular, Armstrong explained how a prior art six degree of freedom controller described in U.S. Patent No. 5,298,919 provided six degrees of freedom through the use of three input members: a mouse-like roller ball, a rotary thumb-wheel, and an exposed trackball. ('525 patent at 3:37-51.) Armstrong believed that for many applications this prior art controller presented a variety of disadvantages. (*Id.* at 3:52-4:30.)

<sup>7</sup> This embodiment is described in more detail, *infra*, at 19-20.

**A. Importing Limitations From the Specification Is a “Cardinal Sin” of Claim Construction**

In line with *Phillips*, Anascape primarily relies on the patents’ specifications to support its constructions, since the claims “do not stand alone,” but, rather, are part of “a fully integrated written instrument.” *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978-79). The specification “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Id.* (quoting *Vitronics Corp. v. Conceptronic Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)).

The Defendants, however, repeatedly attempt to import limitations from preferred embodiments into the asserted claims. In particular, Defendants attempt to read in a “single input member” limitation into *20 different claim terms* of the ’525 and ’700 patent. This practice is fundamentally unsound; the Federal Circuit has repeatedly held that using the specification to read limitations into the chosen claim language is a “cardinal sin” of claim construction. *See, e.g., Phillips*, 415 F.3d at 1320 (“one of the cardinal sins of patent law [is] reading a limitation from the written description into the claims”); *see also Nazomi Communic’ns, Inc. v. ARM Holdings, PLC*, 403 F.3d 1364, 1369 (Fed. Cir. 2005) (claims may embrace “different subject matter than is illustrated in the specific embodiments in the specification”).

Just weeks ago, in *Acumed LLC v. Stryker Corp.*, the Federal Circuit again condemned the practice of importing limitations from the specification into the claims. Nos. 2006-1260 & 2006-1437, 2007 U.S. App. LEXIS 8375, at \*9 (Fed. Cir. Apr. 12, 2007) (attached as Ex. 7). In that case, the accused infringer argued that the term “curved shank” should be limited to curved shanks “with a continuous bend” as opposed to curved shanks “with angled bends or small radius curves.” *Id.* at \*8-10. In support of its limiting construction, the defendant relied on a number of

places in the specification, including the “Summary of the Invention” section, that highlighted the benefits of shanks with a continuous bend and discussed the disadvantages of shanks with angled bends or small radius curves. *Id.* at \*10-11. In response, the patentee argued that the plain meaning of the claim term “curved shank” did not limit the invention to shanks with a continuous bend, and also pointed to dependent claims of the asserted patent that explicitly included a limitation related to a continuous bend. *Id.* at \*11-12. The Federal Circuit agreed with the patentee, specifically finding that the infringer’s reliance on the portions of the specification reciting advantages of the continuous bend was nothing more than “an attempt to import a feature from the preferred embodiment into the claims.” *Id.* at \*11. As discussed below, the Defendants’ attempts to import a “single input member” limitation aligns very closely with the failed attempt to import a limitation in *Acumed* and, likewise, should be rejected.

Moreover, the Defendants’ scattershot attempt to import the same limitation into 20 different terms of the ’525 and ’700 patent underscores the impropriety of importing this limitation. In the few instances when it is appropriate to limit the claims based on the specification, *see, e.g. SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343-44 (Fed. Cir. 2001), the Federal Circuit requires a textual “hook” in the claim language that draws in the limitations of the specification. *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1310 (Fed. Cir. 2005) (requiring a textual “hook” in the claim language in order to read in a limitation and stating that “a party wishing to use statements in the written description to confine or otherwise affect a patent’s scope must, at the very least, point to a term or terms in the claim with which to draw in those statements.”); *see also Ventana Med. Sys. v. Biogenex Labs.*, 473 F.3d 1173, 1182 (Fed. Cir. 2006) (ruling that a prosecution disclaimer of a parent application did not apply when the claim term in the asserted patent used different

language). Instead, the Defendants' request to import the same limitation into 20 different claim terms highlights the lack of any single claim "hook." For these reasons and all of the reasons discussed below, the Court should reject the Defendants' invitations to import limitations from the specification.

### **B. Claim Preambles Rarely Limit the Scope of a Claim**

The Defendants incorrectly contend that the preambles of some of the asserted claims are limitations. The Federal Circuit recognizes that a preamble generally does not limit its claim. *See Allen Eng'g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002). "It is well settled that if the body of the claim sets out the complete invention, and the preamble is not necessary to give life, meaning and vitality to the claim, *then the preamble is of no significance to claim construction because it cannot be said to constitute or explain a claim limitation.*" *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1371 (Fed. Cir. 2003) (emphasis added). Instead, the preamble may limit the claim in only two instances: (1) if the body of the claim does not describe a complete invention or (2) if the patentee clearly relies on the preamble during prosecution to distinguish the claimed invention from the prior art. *Intirtool, Ltd. v. Texar Corp.*, 369 F.3d 1289, 1295 (Fed. Cir. 2004) (citing *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999)).

## **III. ANASCAPE'S PROPOSED CONSTRUCTIONS OF THE DISPUTED TERMS**

### **A. Level of Ordinary Skill in the Art**

As discussed above, the patents require familiarity with mechanical structures, electrical sensors, and circuitry. As a result, a person of ordinary skill in the art would hold a bachelor's degree in mechanical or electrical engineering, and would have one year of experience designing sensors and/or controllers for computers, robotics, video games, and/or other electronic devices.

## B. “Controller” Terms

The parties’ competing constructions for the terms “image controller,” “3-D graphics controller,” and “hand-operated controller” appear in the table below. Because these three terms appear only in the preamble of many of the asserted claims, they are frequently not claim limitations – and do not require construction. In the claims in which these terms appear outside of the preamble, the Court should reject the Defendants’ attempts to import a “single input member” limitation from certain embodiments into the asserted claims, and should instead adopt Anascape’s plain-meaning constructions.

CLAIM TERM, PHRASE, OR CLAUSE	ANASCAPE’S PROPOSED CONSTRUCTION	MICROSOFT’S AND NINTENDO’S PROPOSED CONSTRUCTION
image controller <i>'525 patent: Claims 1, 5-6, 12-20</i>	<i>No construction is necessary. However, should the Court construe this term:</i> an input device interfacing between human hands and a host device such as a computer or television or television based game	A controller having a hand operable, single input member that is moveable along and/or rotatable about three mutually perpendicular axes in six degrees of freedom (“6DOF”) relative to a reference member of the controller.
3-D graphics controller <i>'700 patent: Claims 1-15, 32-33</i>	<i>No construction is necessary. However, should the Court construe this term:</i> a controller for controlling 3-D graphics <u>controller</u> : an input device interfacing between human hands and a host device such as a computer, television, or television based game <u>3-D graphics</u> : imagery with apparent depth	A controller having a hand operable, single input member that is moveable along and/or rotatable about three mutually perpendicular axes in six degrees of freedom (“6DOF”) relative to a reference member of the controller.
hand operated controller <i>'700 patent: Claims 19-20, 22-23, 26-29, 31</i>	<i>No construction is necessary. However, should the Court construe this term:</i> an input device interfacing between human hands and a host device such as a computer or television or television based game	A controller having a hand operable, single input member that is moveable along and/or rotatable about three mutually perpendicular axes in six degrees of freedom (“6 DOF”) relative to a reference member of the controller.

***1. In Many of the Asserted Claims, These Terms Are Not Claim Limitations***

The terms “image controller,” “3-D graphics controller,” and “hand-operated controller,” primarily appear in the preambles of asserted claims of the ’525 and ’700 patents. In these claims, the terms are not limitations because they only explain the intended use of the invention.<sup>8</sup>

Language in a preamble merely extolling the benefits or features of a claimed invention does not limit claim scope. *Catalina Mktg. Int’l, Inc. v. CoolSavings.com, Inc.*, 289 F.3d 801, 809 (Fed. Cir. 2002); *see also E-Watch, Inc. v. March Networks Corp.*, No. 9:06-CV-25, 2006 U.S. Dist. LEXIS 54366, at \*12 (E.D. Tex. Aug. 4, 2006) (explaining that a preamble does not require construction if it does not “breathe life and meaning” into the claim). In addition to merely describing at a high level what is later claimed with specificity, the terms identified by the Defendants are not limitations of the asserted claims because (1) the body of the claim sets forth a complete invention and (2) Armstrong never relied on these terms to distinguish his invention from the prior art.

Claim 5 of the ’525 patent is representative of how these terms appear in the preambles of the asserted claims:

5. An image controller comprising:

- an input member movable on at least two axes, said input member having associated sensors; and
- a plurality of finger depressible buttons, said finger depressible buttons having associated sensors; and
- at least one sheet connecting to the sensors of said input member, and said at least one sheet connecting to the sensors of said finger depressible buttons;
- said at least one sheet includes electrically conductive traces, said traces engaging the sensors;

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<sup>8</sup> These terms only appear in the body of claims 1 and 14 of the ’525 patent and claims 6, 9, 17, 19, and 26 of the ’700 patent. In the remaining asserted claims, claims 6, 12-13, and 15-20 of the ’525 patent and 1-5, 7-8, 10-15, 20, 22-23, 27-29, and 31-33 of the ’700 patent, these terms only appear in the preamble.

at least one of the finger depressible buttons is structured with a resilient dome cap;  
 said resilient dome cap is structured to provide a tactile feedback to a human hand; said at least one sheet comprises  
 a flexible membrane sheet connected to a rigid circuit board sheet.

(’525 patent, claim 5.) As shown in the claim above, many of the asserted claims of the ’525 and ’700 patents use the disputed preamble terms, “image controller,” “3-D graphics controller,” and “hand-operated controller,” only to state the intended use of the invention. Claim 5 of the ’525 patent, for example, begins “[a]n image controller comprising . . .” The scope of the invention is completely defined by the limitations appearing after the transitional phrase “comprising.” The term “image controller,” on the other hand, is merely a lead-in preceding the claim elements that does not breathe life into the claims.

In addition, Armstrong never relied on these terms during the prosecution of the ’525 or ’700 patents to distinguish prior art. Therefore, where found in the preamble, these terms are not claim limitations and do not require construction.

## ***2. The “Controller” Terms Should Be Given Their Plain Meaning***

To the extent the terms, “image controller,” “3-D graphics controller,” and “hand-operated controller” require construction, they should be governed by their plain meaning, which will be readily understandable by the fact-finder in this case. See *Acumed LLC v. Stryker Corp.*, 2007 U.S. App. LEXIS 8375, at \*9 (“The task of comprehending [the words of a claim] is not always a difficult one.”); *Produits Berger S.A. v. Schemenauer*, No. 2:06-cv-002, 2007 U.S. Dist. LEXIS 13370, at \*17 (E.D. Tex. Feb. 27, 2007) (holding that the term “separated” was “plainly set forth in the claim” and finding that no construction was necessary); *Vision Advancement, LLC v. Vistakon*, No.2:05-CV-455, 2007 U.S. Dist. LEXIS 5742, at \*34-39 (E.D. Tex. Jan. 26,

2007) (holding that the term a number of claim terms did not require construction because their plain meaning was clear and understandable). Therefore, no construction is necessary.

Should the Court decide to construe these claims, Anascape has proposed constructions that capture the terms' plain meaning:

TERM	ANASCAPE'S PROPOSED CONSTRUCTION
controller; hand-operate controller; and image controller	an input device interfacing between human hands and a host device such as a computer or television or television based game
3-D graphics	imagery with apparent depth

These proposals capture the plain meaning of the claim terms, and are derived solely from the intrinsic evidence of the '525 and '700 patents. With respect to "controllers," the '525 patent describes how controllers are input devices interfacing between a human and a machine:

This invention relates to structuring for sheet supported sensors and associated circuitry in hand-operated graphic image controllers, and particularly six degree of freedom computer image controllers which serve as *interface input devices between the human hand(s) and graphic image displays such as a computer or television display, a head mount display or any display capable of being viewed or perceived as being viewed by a human.*

('525 patent at 1:13-21.) Similarly, in the prosecution history of the '700 patent, Armstrong acted as his own lexicographer and defined 3-D graphics as imagery with apparent depth:

[T]he use of the wording "3-D graphics" is intended to mean or be defined as imagery displayed by a television or the like and the imagery has depth, so that, as a first example, when a distant object passes behind a close object, the close object obscures all or part of the distant object, and as a second example, a 3-D object displayed on the television may rotate or appear to rotate as the portion of the object which the viewer would normally see in a real world object is displayed and the portion which the viewer would not normally see is not displayed. Thus, "3-D graphics" mimic our three dimensional world but may be displayed on a two dimensional television screen.

(’700 patent file history, March 11, 2003 Amendment at 23, attached as Ex. 2.) For these reasons, the Court should either decline to construe these terms or adopt the constructions proposed by Anascape, which are based on the intrinsic evidence of the ’525 and ’700 patents.

***3. The Court Should Refuse to Import Limitations From the Disclosed Embodiments of the ’525 and ’700 Patents***

In stark contrast to Anascape’s plain meaning proposals, the Defendants’ proposed constructions attempt to import limitations from the disclosed embodiments into the asserted claims. Specifically, the Defendants ask the Court to construe these terms to require a “single input member that is movable along and rotatable about three mutually perpendicular axes in six degrees of freedom (’6DOF’) relative to a reference member.” The Defendants’ construction should be rejected for at least four reasons: (a) the plain language of the claim terms does not require Defendants’ proposed construction; (b) importing this proposal would violate the doctrine of claim differentiation; (c) Microsoft took the opposite position in its reexamination request; and (d) such a construction would exclude disclosed embodiments of the ’525 and ’700 patents.

**a) The Plain Language Does Not Require a Single Input Member**

The Federal Circuit has advised Courts to first look to the words of the claims themselves to define the scope of the patented invention. *Phillips*, 415 F.3d at 1312. Nothing in the asserted claims of the ’525 and ’700 patents requires a single input member capable of movement in six degrees of freedom. More specifically, nothing about the terms “image controller,” “3-D graphics controller,” and “hand-operated controller” requires a single input member capable of movement in six degrees of freedom. Instead, the specifications contradict the Defendants’ proposal because they specifically describe controllers that provide fewer than six degrees of freedom and/or contain multiple input members:

- “a three degree of freedom joystick input device . . .” (’525 patent at 1:42-43);
- “a two degree of freedom joystick . . .” (’525 patent at 1:43-44);
- “hand-operated graphic image controllers, and particularly six degree of freedom computer image controllers . . .” (’525 patent at 1:15-17); and
- “[the multiple input member prior art device] is basically a six degree of freedom computer controller . . . . However, . . . the lack of a hand operable single input member operable in six degrees of freedom . . .” (’525 patent at 3:26-32).

Moreover, the specifications explicitly teach input members operable in fewer than six degrees of freedom: “The input member . . . may be manipulable or operable in up to 6 DOF . . . .” (’525 patent at 7:39-42.) The use of the terms “image controller,” “3-D graphics controller,” and “hand-operated controller” terms in the quoted passages confirm that these terms are not constrained to a single input member capable of movement in six degrees of freedom.

#### **b) The Defendants’ Construction Violates the Doctrine of Claim Differentiation**

A second reason that Defendants’ proposed constructions are incorrect is that they violate the doctrine of claim differentiation. That doctrine is based on “the common sense notion that different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope.” *Karlin Tech. Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971-72 (Fed. Cir. 1999). In this case, the Defendants’ proposed constructions attempt to bring the limitations of dependent claims 4, 9, and 10 of the ’525 patent into the other asserted claims. “The doctrine of claim differentiation suggests that the independent claims here should not include explicit limitations of a dependent claim.” *Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 1319 (Fed. Cir. 2006). For example, claim 1 of the ’525 patent explicitly requires only two degrees of freedom:

1. An image controller comprising:

an input member with associated sensors, said input member moveable on at least two axes; and . . .

In comparison, claim 4 of the '525 patent, which depends from claim 1, states:

4. An image controller according to claim 3 in which said input member is operable on at least six axes.

Because dependent claims 4, 9, and 10 of the '525 patent explicitly state that the input member should be operable on six axes, the Court should find that the terms “input member” and “image controller,” found in the independent claims, do not require an input member capable of operation in six degrees of freedom. *See Acumed, LLC*, 2007 U.S. App. LEXIS 8375, at \*12 (finding that the presence of a dependent claim that explicitly required a continuous bend raised a presumption that the independent claim did not contain such a limitation). The Defendants’ attempt to read the limitation of dependent claims 4, 9, and 10 into the independent claims from which they depend, as well as into other asserted claims that do not contain the six degree of freedom limitation, should be rejected.

**c) Microsoft Previously Stated That None of the Claims of the '700 Patent Contained a “Single Input Member” Limitation**

The Defendants’ proposed constructions flatly contradict the position Microsoft has taken before the Patent Office in its reexamination request filed on the '700 patent.<sup>9</sup> In that document filed with the Patent Office only three months ago, Microsoft<sup>10</sup> stated: “None of Claims 1-33 of

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<sup>9</sup> The Court should estop Microsoft from taking a contrary position in this lawsuit. “The doctrine [of judicial estoppel] prevents a party from asserting a position in a legal proceeding that is contrary to a position previously taken in the same or earlier proceedings. The policies underlying the doctrine include preventing internal inconsistency, precluding litigants from ‘playing fast and loose’ with the courts, and prohibiting parties from deliberately changing positions according to the exigencies of the moment.” *See Karah Bodas Co., L.L.C. v. Perusahaan Pertambangan Minyak Dan Gas Bumi Negara*, 364 F.3d 274, 293-94 (5th Cir. 2004). A district court may invoke judicial estoppel when an inconsistent statement is made in front of the Patent Office. *See Synopsys, Inc. v. Magma Design Automation*, No. C-04-3923-MMC, 2007 U.S. Dist. LEXIS 6814, at \*74-75 (N.D. Cal. Jan. 31, 2007) (“judicial estoppel is applicable to cases in which the prior statements at issue were made to the PTO”).

<sup>10</sup> Microsoft’s litigation counsel also represents Microsoft in its *inter partes* reexamination related to the '700 patent.

the '700 Patent has the limitation of a single input member to provide six degrees of freedom."<sup>11</sup> (Microsoft's '700 patent reexamination request at 21, attached as Ex. 3.) Moreover, Microsoft has asserted that a number of prior art references that do not include a single input member to provide six degrees of freedom invalidate the '700 patent. (*See id.* at 55-75.) The Court should reject Microsoft's contrary litigation position.

**d) The Single Input Member Limitation Would Exclude an Embodiment of the '525 and '700 Patents**

The Defendants' proposed construction would read out disclosed embodiments of the '525 and '700 patent that do not include a single input member capable of movement in six degrees of freedom. The Federal Circuit has held that such a claim construction approach is rarely, if ever, correct. *See MBO Labs., Inc. v. Becton, Dickson & Co.*, 474 F.3d 1323, 1333 (Fed. Cir. 2007) ("A claim interpretation that excludes a preferred embodiment from the scope of the claim is rarely, if ever, correct."). For example, the embodiment described in figures 1-6 of the '525 patent uses two input members to capture the six degrees of freedom. Figure 4 of the '525 patent is reproduced below.

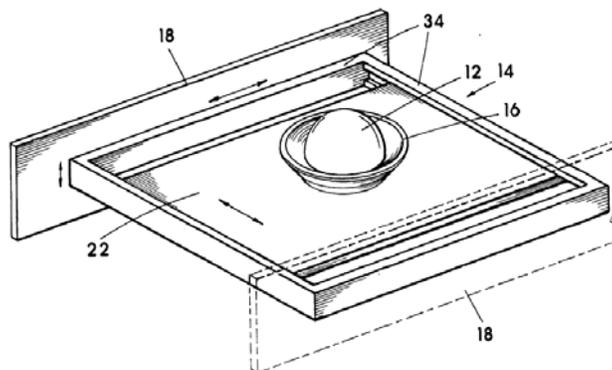


FIG. 4

<sup>11</sup> Nintendo incorporated Microsoft's reexamination request in its Preliminary Validity Contentions: "copies of the requests for reexamination . . . filed by Defendant Microsoft . . . are hereby incorporated by reference. (Nintendo's Preliminary Validity Contentions at 2, attached as Ex. 4.)

In this embodiment, the trackball **12** acts as a first input member capable of receiving inputs on any of the three rotational axes. (*Id.* at 12:59-13:7.) Sensors mounted underneath the trackball **12** sense the rotational input by the user in the pitch, yaw, and roll directions. (*Id.*) Collet **16**, which the patent explicitly refers to as a “secondary input member,” receives inputs on the three linear axes. (*Id.* at 17:20-23, 12:49-51.) The collet **16** acts as a joystick, and is thereby easily grasped by the user’s hand and captures inputs in the three linear directions. (*Id.* at 12:49-51, 13:27-35.) As a second example, the embodiment disclosed in Figure 47 of the ’525 patent shows an input member capable of accepting inputs along only two axes. Although this embodiment can be deployed with other sensors to create a single input member capable of capturing six degrees of freedom, it could be deployed by itself as an input member capable of movement along only two axes.

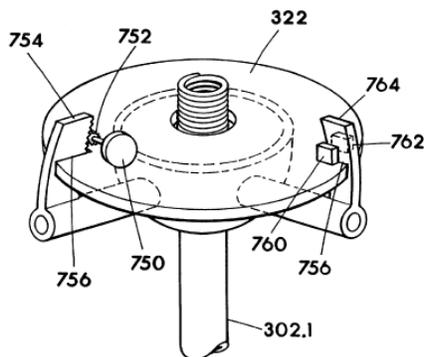


FIG. 47

For all of these reasons, the Court should refuse to import a “single input member” limitation into the asserted claims of the ’525 and ’700 patent.

### C. Other Terms In Which the Defendants Attempt to Read In a “Single Input Member” Limitation

There are numerous other terms in which the defendants attempt to read in the same “single input member” limitation. The parties’ competing constructions for these terms are listed

below. For each of the terms, Anascape has proposed constructions that track the plain meaning of the claim; these proposed constructions should be adopted.

CLAIM TERM, PHRASE, OR CLAUSE	ANASCAPE'S PROPOSED CONSTRUCTION	MICROSOFT'S AND NINTENDO'S PROPOSED CONSTRUCTION
input member '525 patent: Claims 1, 5, 12	a trackball or a joystick	A hand operable, single trackball or handle fit to be manipulated by a human hand in 6DOF.
a first [second] [third] element '700 patent: Claims 1, 3, 5, 6, 9, 12-13, 15, 32	<i>No construction is necessary. However, should the Court construe this term:</i> a first [second] [third] structure, member, part, component or combination of the same	The first, second and third elements are controlled by a hand operable, single input member moveable in 6DOF
a [first, second, third, fourth] rotary potentiometer '700 patent: Claim 9	<i>No construction is necessary. However, should the Court construe this term:</i> a [first, second, third, fourth] resistive element with a rotating element that varies electrical flow due to positional changes	Microsoft's proposed construction: <sup>12</sup> The first element, and the first, second, third and fourth rotary potentiometers are controlled or activated by a hand operable, single input member moveable in 6DOF.
a first element '700 patent: Claim 14	<i>No construction is necessary. However, should the Court construe this term:</i> a structure, member, part, component or combination of the same	The first element and the first, second, third and fourth bi-directional proportional sensors are controlled or activated by a hand operable, single input member moveable in 6DOF.
a [first, second, third, fourth] bi-directional proportional sensor '700 patent: Claim 14	a [first, second, third, fourth] sensor that produces signals representative of change in two directions of the same axis (e.g. left and right)	See "first element," above.
[structure]; [second] [third] element '700 patent: Claims 19, 26	<i>No construction is necessary. However, should the Court construe this term:</i> a [second] [third] structure, member, part, component or combination of the same	The structure, and the second and third elements are controlled by a hand operable, single input member moveable in 6DOF.

***1. The Court Should Reject Defendants' Attempt to Read In a "Single Input Member" Limitation Into 20 Different Claim Terms***

Nothing in any of these claim terms, specification, or prosecution history requires a single input member operable in six degrees of freedom. Moreover, the Defendants' attempt to

<sup>12</sup> This term does not appear in any claims asserted against Nintendo.

read the same limitation into multiple different claim terms underscores the fact that no single claim term provides the textual “hook” necessary to bring in this limitation. *NTP*, 418 F.3d at 1310. Instead, the Defendants ask the Court to randomly import the same limitation into a multitude of claim terms, hoping that the Court adopts just one. For this reason and all of the reasons discussed above, the Court should reject the Defendants’ invitations to import a “single input member” limitation from the specification.

## ***2. The Court Should Adopt Proposals That Reflect the Terms’ Plain Meaning***

Each of the above terms should be governed by their plain meaning, which will be readily understandable by the fact-finder in this case. *See Acumed LLC*, 2007 U.S. App. LEXIS 8375, at \*9; *Produits Berger S.A.*, 2007 U.S. Dist. LEXIS 13370, at \*17; *Vision Advancement, LLC*, 2007 U.S. Dist. LEXIS 5742, at \*34-39; and parentheses at *supra* § III.B.2. Therefore, no construction is necessary.

Should the Court decide to construe these claims, Anascape has proposed constructions that are faithful to the plain meaning of the claim. Each of these terms is presented in the table below along with the most pertinent claim construction evidence that should guide the Court’s construction of these terms:

CLAIM ELEMENT	ANASCAPE’S PROPOSED CONSTRUCTION	EVIDENCE
input member	a trackball or a joystick	“The input member can be of a continuously rotatable trackball-type or a limited rotation joystick-type . . .” (’525 patent, Abstract.)
a first [second] [third] element	a first [second] [third] structure, member, part, component or combination of the same	“In the claims the use of the word ‘element’ is intended to mean or be defined as a singular structure, member, part, component or the like, or a plurality of structures, members, parts, components or the like, as disclosed in Applicant’s disclosure and equivalents.” (’700 patent file history, 3/11/2003 Amendment at 24, attached as Ex. 2.)
a [first, second, third, fourth] rotary	a [first, second, third, fourth] resistive element with a rotating element that varies electrical flow due to positional	The New IEEE Standard Dictionary of Electrical and Electronics Terms (5th Ed. 1993) (defining “potentiometer” as “a resistor with one or more adjustable sliding contacts . .

CLAIM ELEMENT	ANASCAPE'S PROPOSED CONSTRUCTION	EVIDENCE
potentiometer	changes	." and a "resistive element with two end terminals and a sliding contact") attached as Ex. 5.
a [first, second, third, fourth] bi-directional proportional sensor	a [first, second, third, fourth] sensor that produces signals representative of change in two directions of the same axis (e.g. left and right)	"... all three perpendicular Cartesian coordinates (three mutually perpendicular axes herein referred to as yaw, pitch and roll) are interpreted bi-directionally, both in a linear fashion as in movement along or force down any axis, and a rotational fashion as in rotation or force about any axis." ('525 patent at 8:52-56.)  "... a 6 DOF device has 6 axes which are interpreted bi-directionally (move along the axis to the left or right, but not both simultaneously)." ('525 patent at 30:26-28.)

#### D. "moveable on [] two [] axes"

As shown in the table below, the parties dispute whether these terms are limited to linear movement or whether they encompass rotational movement as well.

CLAIM TERM, PHRASE, OR CLAUSE	ANASCAPE'S PROPOSED CONSTRUCTION	MICROSOFT'S AND NINTENDO'S PROPOSED CONSTRUCTION
moveable on two axes '700 patent: Claim 14	<i>No construction is necessary.</i>	Capable of linear movement along two axes relative to a reference member of the controller.
moveable on at least two axes '525 patent: Claims 1, 5, 12	<i>No construction is necessary.</i>	Capable of linear movement along at least two axes relative to a reference member of the controller.
movable on two mutually perpendicular axes '700 patent: Claims 19, 26	<i>No construction is necessary.</i>	Capable of linear movement along two mutually perpendicular axes relative to a reference member of the controller.

The intrinsic evidence makes clear that the claim term "moveable" encompasses linear and rotational movement. For example, the specification describes "a hand operable, single input member moveable in six degrees of freedom . . ." and discusses how the invention provides "six degrees of freedom of movement. . . ." ('525 patent at 1:62-63, 4:64-65.) Because three of the degrees of freedom are linear and the other three are rotational, these portions of the

specification confirm that the term “moveable” encompasses both rotational and linear movement. As another example, the examiner referred to “rotational movement” when describing the invention of the ’700 patent. (’700 patent file history, 12/16/2002 Notice of Allowance at 2, attached as Ex. 6.)

Similarly, the specification refers to “linear movements,” (’525 patent at 3:42), which implies that there can be other types of movements, such as rotational movements. *See Phillips*, 415 F.3d at 1314 (finding that use of the language “steel baffles” strongly implied that the term “baffles” did not inherently mean objects made of steel).

Furthermore, the Defendants’ construction of “moveable on two . . . axes” again excludes preferred embodiments of the patents – a claim construction approach that is rarely, if ever, correct. *See MBO Labs., Inc.*, 474 F.3d at 1333. For example, the term “moveable on two mutually perpendicular axes” arises in claim 19 of the ’700 patent, which requires a platform capable of rotating along two mutually perpendicular axes and two elements, each of which is moveable on two mutually perpendicular axes:

19. A hand operated controller comprising structure allowing hand inputs rotating a platform on two mutually perpendicular axes . . .
  - a second element movable on two mutually perpendicular axes, . . .
  - a third element movable on two mutually perpendicular axes . . .

If the Defendants’ proposed construction is adopted, then claim 19 of the ’700 patent would require the controller to capture four linear degrees of freedom; however, only three dimensions exist in reality. As one would expect, the preferred embodiments capture three rotational and three linear degrees of freedom. (*See, e.g.*, ’525 patent at 8:49-56.)

Similarly, the Defendants’ proposal should be rejected because it excludes a preferred embodiment from the scope of claim 14 of the ’700 patent. Claim 14 requires “a first element

movable on two axes, said first element structured to activate four unidirectional sensors.” Figure 28 of the ’525 patent, shown below, shows one embodiment of this element. The first element, which is platform 300, rotates about shaft 302 – as opposed to linear movement – to activate four unidirectional sensors 207. If the Defendants’ proposal is adopted, it would exclude this embodiment of the ’700 patent.

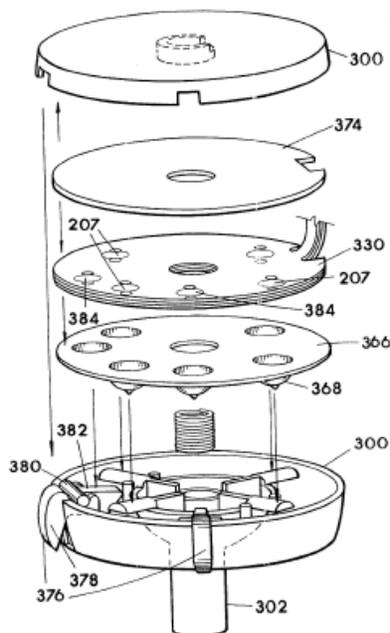


FIG. 28

Because the term “moveable” does not exclude rotational movement, each of these terms should be governed by their plain meaning, which will be readily understandable by the factfinder in this case. See *Acumed LLC; Produits Berger S.A.; Vision Advancement, LLC*; and parentheticals at *supra* § III.B.2. Therefore, no construction is necessary.

#### **E. “flexible membrane sheet”**

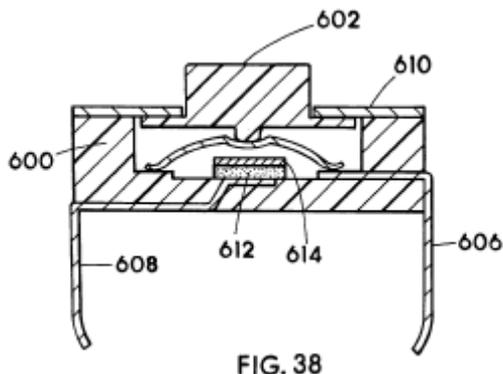
The parties dispute whether the term “flexible membrane sheet” must include sensors and circuitry or, rather, may optionally have sensors and/or circuitry. The parties’ competing constructions are presented below:

CLAIM TERM, PHRASE, OR CLAUSE	ANASCAPE'S PROPOSED CONSTRUCTION	MICROSOFT'S AND NINTENDO'S PROPOSED CONSTRUCTION
flexible membrane sheet '525 patent: Claims 1, 5, 12, 19 '700 patent: Claims 1, 3, 5, 6, 9, 26	a flexible sheet that includes sensors and/or circuitry	A flexible sheet which includes sensors and conductive traces.

Although many of the preferred embodiments of the '525 and '700 patents show flexible membrane sheets with both sensors and circuitry, the specification confirms that a flexible membrane sheet is not required to contain both sensors and circuitry.

- “Some, most, or all of the sensors are *preferably* supported on a generally single plane, such as on a printed flexible membrane sensor sheet . . .” ('525 patent, Abstract);
- “hand applying of the sensors and associated electrical conductors onto the flat sheet *is not outside the scope of the invention* . . .” ('525 patent at 6:3-5);
- “flexible membrane sensor sheet can also utilize a variety of sensors such as contact pairs and pressure-sensitive variable output sensors (pressure-sensitive variable resistors) printed *or otherwise placed* onto flexible membrane sensor sheets . . .” ('525 patent at 8:44-48); and
- “. . . a flexible membrane sensor sheet *having at least circuitry* in the form of electrically conductive circuit traces . . .” ('525 patent at 12:12-14.)

Additionally, figure 38 of the '525 patent (depicted below) shows a stand-alone sensor that could be connected to and used in conjunction with a sensor-less flexible membrane sheet. (*See generally* '525 patent at 27:58-28:37.) The disclosure of a stand-alone sensor supports a finding that the flexible sheet need not include integrated sensors.



Based on these portions of the specification, it is improper to construe this term as requiring both sensors and circuitry. Instead, “flexible membrane sheet” should be construed as “a flexible sheet that includes sensors and/or circuitry.”

**F. “at least one sheet”**

The parties dispute whether the claim term “at least one sheet” requires a flexible membrane sheet or, alternatively, encompasses every type of sheet disclosed in the ’525 and ’700 patents.

CLAIM TERM, PHRASE, OR CLAUSE	ANASCAPE’S PROPOSED CONSTRUCTION	MICROSOFT’S AND NINTENDO’S PROPOSED CONSTRUCTION
at least one sheet ’525 patent: Claims 1, 5, 12, 19 ’700 patent: Claims 1, 3, 5, 6, 8, 9, 10, 20 and 26	one or more circuit boards, flexible membrane sheets, or rigid membrane support structures connected together	at least one flexible membrane sheet

The use of the term “flexible membrane sheet” confirms that the term “sheet” is not limited to only flexible membrane sheets. *See Phillips*, 415 F.3d at 134 (finding that use of the language “steel baffles” implied that the term “baffles” did not inherently mean objects made of steel). For example, the following portions of the specifications describe how different types of sheets, including flexible membrane sheets, circuit board sheets, and rigid membrane sheets, can all be used in the novel game controllers:

- “Some, most, or all of the sensors are preferably supported on a generally single plane, such as on a printed flexible membrane sensor sheet or circuit board sheet” (’525 patent, Abstract);
- “. . . all sensors for 6 DOF are positioned on one substantially flat sheet member, such as a circuit board sheet or membrane sensor sheet . . .” (’525 patent at 5:34-37);
- “. . . lower member 20 is shown as a rigid sheet member such as a circuit board, but could be structured as a rigid sheet supporting a flexible membrane sensor sheet . . .” (’525 patent at 12:10-13);
- “. . . a substantially flat plate that might be manufactured as a traditional printed circuit board sheet . . . or as a flat rigid plate-like structure supporting a flexible membrane sensor sheet 330 . . .” (’525 patent at 24:48-53); and
- “. . . the same inventive structurings can translate mechanical or physical inputs to either a flexible membrane sensor sheet or to a rigid circuit board sensor sheet” (’525 patent at 25:22-26).

Moreover, the claim language confirms that the term “at least one sheet” does not necessarily require a flexible membrane sheet:

12. An image controller comprising:

- an input member with associated sensors, said input member moveable on at least two axes; and
- a plurality of finger depressible buttons with associated sensors; and
- at least one sheet connecting to the sensors of said input member, and said at least one sheet connecting to the sensors of said finger depressible buttons; said at least one sheet comprising at least a flexible membrane sheet.

(’525 patent, claim 12.) If the Defendants’ construction were correct, the underlined portion of the claim would be rendered superfluous. Moreover, the claims that depend from claim 12 confirm that a circuit board sheet and rigid membrane support structure are other types of sheets that should be included within the construction of “at least one sheet.”

- 19. An image controller according to claim 12 in which said at least one sheet comprises said flexible membrane sheet connected to a second sheet.
- 20. An image controller according to claim 19 in which said second sheet is a circuit board.
- 21. An image controller according to claim 19 in which said second sheet is a rigid membrane support structure.

(’525 patent, claims 19-21.) Therefore, the appropriate construction of “at least one sheet” is “one or more circuit boards, flexible membrane sheets, or rigid membrane support structures connected together.”

**G. “said at least one sheet comprises a flexible membrane sheet connected . . .”**

The terms “at least one sheet” and “flexible membrane sheet” are being construed by the Court. Despite those constructions, Microsoft insists that the terms recited in the table below also require construction. Nintendo has not proposed a construction or contended that these terms require construction.

CLAIM TERM, PHRASE, OR CLAUSE	ANASCAPE’S PROPOSED CONSTRUCTION	MICROSOFT’S PROPOSED CONSTRUCTION
said at least one sheet comprises a flexible membrane sheet connected to a [rigid circuit board] [second sheet] <i>’525 patent: Claims 1, 5, 19</i> a circuit board sheet connected to a flexible membrane sheet <i>’700 patent: Claims 1, 3, 5, 6, 9, 26</i>	<i>See construction of “flexible membrane sheet” and “at least one sheet.” No further construction is necessary.</i>	The flexible membrane sheet (see “flexible membrane sheet,” above) is attached to a [rigid circuit board][rigid circuit board or flexible membrane sheet] by electrically conductive traces (e.g., a membrane “tail”) which structurally and electrically connect the flexible membrane sheet to the [rigid circuit board][rigid circuit board or flexible membrane sheet].

As is apparent from its length, Microsoft’s proposed construction is a transparent attempt to read in a raft of limitations from the specification. Nothing in the claims, specifications, or file history of the ’525 or ’700 patent requires a “membrane tail” that structurally and electrically connects the flexible membrane sheet with the remaining sheet structure. Instead, these terms should be governed by their plain meaning, which will be readily understandable by the factfinder in light of the constructions of “flexible membrane sheet” and “at least one sheet.” *See Acumed LLC; Produits Berger S.A.; Vision Advancement, LLC*; and parentheticals at *supra* § III.B.2.

**H. “the sensors are connected by at least one sheet . . . comprises a flexible membrane sheet”**

These terms present exactly the same issue as the previous terms involving the “single input member” limitation. Likewise, the Court should decline to commit a cardinal sin of claim construction and read in the “single input member” limitation requested by Microsoft. The competing proposals from Anascape and Microsoft are presented in the table below; again, Nintendo has not proposed a construction or contended that these terms require construction

CLAIM TERM, PHRASE, OR CLAUSE	ANASCAPE’S PROPOSED CONSTRUCTION	MICROSOFT’S PROPOSED CONSTRUCTION
[the sensors are] connected [to] [by] at least one sheet... <i>'700 patent: Claims 1, 3, 5, 6, 8, 9, 10, 20, 26</i> at least one sheet...connecting...to the sensors <i>'525 patent: Claims 1, 5, and 12</i>	<i>See '525 patent, “at least one sheet,” above. No further construction is necessary.</i>	The at least one sheet is the flexible membrane sheet (see “at least one sheet,” “flexible membrane sheet,” above). The electrically conductive circuit traces on the flexible membrane sheet contact the sensors of both the six degree of freedom (“6DOF”) hand operated single input member (see “3-D graphics controller,” above) and the buttons.

**I. “electrically conductive traces located on said at least one sheet” and “said at least one sheet includes electrically conductive traces, said traces engaging the sensors”**

The parties have proposed three separate constructions for these claim terms, which are presented in the table below.

CLAIM TERM, PHRASE, OR CLAUSE	ANASCAPE’S PROPOSED CONSTRUCTION	MICROSOFT’S AND NINTENDO’S PROPOSED CONSTRUCTION
[electrically conductive traces located on said at least one sheet]; [said at least one sheet includes electrically conductive traces, said traces engaging the sensors] <i>'525 patent: Claims 1, 5</i>	<i>electrically conductive traces: fixed-place electrical conductors on or within a circuit board or flexible membrane</i> <i>See construction of “at least one sheet.” No further construction is necessary.</i>	Microsoft’s Proposed Construction Electrically conductive circuit traces on the at least one sheet (see “at least one sheet,” above) contact the sensors of both the six degree of freedom (“6 DOF”) hand operable, single input member and the finger depressible buttons. Nintendo’s Proposed Construction <b>electrically conductive traces, said traces engaging the sensors:</b> conductive ink traces, said conductive ink traces contacting the sensors

CLAIM TERM, PHRASE, OR CLAUSE	ANASCAPE'S PROPOSED CONSTRUCTION	MICROSOFT'S AND NINTENDO'S PROPOSED CONSTRUCTION
		on the sheet

The Court should dismiss Microsoft's proposal, which attempts to import a "single input member" limitation, for all of the reasons discussed earlier in the brief.

Nintendo also attempts to import unwarranted limitations from the specification. The specification describes the circuit traces as "fixed-place electrical conductors" that are located on or within the different sheet members:

- "Automated manufacturing of circuit boards with fixed-place trace conductors, sensors, discrete electronic components and integrated chips . . ." ('525 patent at 6:9-11);
- "The conductive traces can be used to bring electricity to the sensors . . ." ('525 patent at 5:39-40);
- ". . . electrically connected with fixed-place trace circuitry . . ." ('525 patent at 5:29-30); and
- ". . . electrically conductive traces are applied to the sheet members . . ." ('525 patent at 5:37-38).

Therefore, an appropriate construction of the term "electrically conductive traces" is "fixed-place electrical conductors on or within a circuit board or flexible membrane." The claim terms and specification do not support further limitations. Nintendo's attempt to require "conductive ink traces" will likely be based on an exemplary teaching of the specification, which merely explains one way that flexible membrane sheets were being manufactured in 1996:

Flexible membrane sensor sheets are currently being manufactured by way of utilizing non-conductive flexible plastics sheets, and printing thereon with electrically conductive ink when the sheets are laying flat, to define circuit conductors and contact switches (sensors).

('525 patent at 6:24-29.) Nothing in the claims or specification limits the construction of flexible membrane sheet to this method of manufacture. Nintendo's proposal ignores other manufacturing methods disclosed in the '525 patent, such as adhering conductive material to

non-etched areas of the sheet. ('525 patent at 6:16-19.) Moreover, the use of different and broader language – “conductive traces” instead of “conductive ink” – implies that the former has a different meaning than the latter. *See Acumed LLC*, 2007 U.S. App. LEXIS 8375, at \*16-17 (holding that the term “transverse holes” had a different meaning from “perpendicular holes” because the patentee used a different term that implied a broader scope).

**J. “detectable by the user”**

Microsoft contends that this term is indefinite. Anascape and Microsoft, on the other hand, do not contend that a construction is necessary. However, if the Court decides to construe this term, it should be construed as “transmitted to the user’s hand” as described below.

CLAIM TERM, PHRASE, OR CLAUSE	ANASCAPE’S PROPOSED CONSTRUCTION	MICROSOFT’S PROPOSED CONSTRUCTION
detectable by the user <i>'700 patent: Claims 1, 3, 6, 9, 12, 15, 19, 26</i>	<i>No construction is necessary. However, should the Court construe this term:</i> transmitted to the user's hand	Indefinite.

This claim term appears in many claims of the '700 patent; in most cases, it describes the tactile feedback provided by the controller: “tactile feedback means for providing vibration detectable by the user of the game.” ('700 patent, claim 3.) Although the plain meaning of this term is easily understood by anyone, including those skilled in the art, the specification describes exactly how Armstrong intended this term to be understood in his patents:

Furthermore, as mentioned above, if such an on/off switch . . . were to be of a type which made a *detectable click or snap* upon being activated . . ., then this click or snap *could be felt or heard by the user*, and thus *the user would be provided information alerting him of the activation or possibly deactivation of the switch*.

('525 patent at 14:2-13 (emphasis added).)

Vibration lines 640 indicate an energetic vibration emanating outward either through support 630 or actuator 634 as a *mechanical vibration transmitted through the connected parts to the user's hand*, or as air vibrations perceived by

the user's ear, and indicating the "snap-through" turn-on/off sensation of resilient dome cap 632 as it impinges upon and activates the sensor.

(’525 patent at 29:16-23 (emphasis added).) Similarly, the ’828 patent describes how tactile feedback is transmitted to a user’s hand:

[Tactile] feedback could be employed, for example, in the case that the user attempts to pass through a blockage or make some other illegal movement input. In the real world, if a person touches one object with another *he or she senses the physical contact with his or her hand*. With this invention, when movement results in "contact" the ball gently vibrates. The mind naturally interprets this vibration as normal tactile feedback, thus this invention offers a rich natural interaction with the electronic environment.

(’828 patent at 2:51-62, attached as Ex. 1 (emphasis added).) Based on the teachings of these specifications, there can be no doubt that this term is amenable to construction, and therefore definite. *Bancorp Servs., L.L.C. v Hartford Life Ins. Co.*, 359 F.3d 1367, 1371 (Fed. Cir. 2004) (“We have held that a claim is not indefinite merely because it poses a difficult issue of claim construction; if the claim is subject to construction, *i.e.*, it is not insolubly ambiguous, it is not invalid for indefiniteness.”). The Court should either decline to construe this term, or construe it as “transmitted to the user’s hand.”

**K. “navigating a viewpoint”**

The parties dispute the construction of the term “navigating a viewpoint” because the Defendants attempt to narrow the scope of this claim term to exclude the explicit teachings of the specification. The parties’ competing constructions are presented below.

CLAIM TERM, PHRASE, OR CLAUSE	ANASCAPE’S PROPOSED CONSTRUCTION	MICROSOFT’S AND NINTENDO’S PROPOSED CONSTRUCTION
navigating a viewpoint <i>’700 patent: Claims 19, 26</i>	<i>No construction is necessary. However, should the Court construe this term:</i> controlling the user’s point of view in 3-D graphics	Positioning and orienting a user’s view, as opposed to controlling an object.

This term should be governed by its plain meaning, which will be readily understandable by the fact-finder in this case. *See Acumed LLC; Produits Berger S.A.; Vision Advancement, LLC*; and parentheticals at *supra* § III.B.2. Therefore, no construction is necessary. However, should the Court construe this term, an appropriate construction would be “controlling the user’s point of view in 3-D graphics.” This construction is based on the specification:

In order that 6 DOF controllers be more affordable, and for a user to be easily able to control objects and/or *navigate a viewpoint within a three-dimensional graphics display*, . . . . The controllers provide structuring for converting full six degrees of freedom physical input . . . into representative outputs or signals useful either directly or indirectly for *controlling or assisting in controlling graphic image displays*.

(’525 patent at 4:45-55.) The construction proposed by the Defendants, on the other hand, finds no support in the specification or any other claim construction evidence.

**L. “economical combination of elements”**

Microsoft contends that this term is indefinite. Anascape and Nintendo, on the other hand, do not contend that the term needs to be construed.

CLAIM TERM, PHRASE, OR CLAUSE	ANASCAPE’S PROPOSED CONSTRUCTION	MICROSOFT’S PROPOSED CONSTRUCTION
economical combination of elements <i>’700 patent: Claim 32</i>	<i>No construction is necessary.</i>	Indefinite

No construction is necessary because this term only appears in the preamble of asserted claim 32, as shown below:

32. A 3-D graphics controller having an economical combination of elements and buttons allowing a user to control a television based game, the controller comprising:  
a housing;

- a first element structured to activate four unidirectional sensors used to control a television based game, said first element supported at least in part by said housing and sufficiently exposed to allow two axes of input;
  - a second element structured to activate a first two rotary potentiometers used to control the game;
  - a third element structured to activate a second two rotary potentiometers used to control the game;
  - a circuit board supporting circuitry, said circuit board located in said housing, the rotary potentiometers mounted to said circuit board;
  - an independent first button structured to activate a first button sensor, said first button depressible by a single finger of the user, said first button sensor at least in part supported by said housing, said first button sensor capable of outputting a proportional signal used to control the game;
  - an independent second button structured to activate a second button sensor, said second button depressible by a single finger of the user, said second button sensor at least in part supported by said housing, said second button sensor capable of outputting a proportional signal used to control the game;
- active tactile feedback structure located in said housing.

The preamble of this claim only states an intended purpose for the claimed controller – having an economical combination of elements and controlling a television based game; the body of the claim recites a complete invention. Armstrong never relied on this term to distinguish prior art during the prosecution of the '700 patent. Therefore, the preamble is not a limitation of the '700 patent and does not need to be construed. *See Intirtool, Ltd.*, 369 F.3d at 1295 (holding that a preamble acts as a limitation only if the body of the claim does not describe a complete invention or if the patentee relies on the preamble during prosecution).

Because the preamble of this claim is not a limitation, it cannot render the claim indefinite.<sup>13</sup> *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999) (“If, however, the body of the claim fully and intrinsically sets forth the complete invention, . . . then the preamble is of no significance to claim construction because it cannot be said to

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<sup>13</sup> Regardless, the term “economical combination of elements” would be readily understood by one of ordinary skill in the art. *Bose Corp. v. JBL, Inc.*, 274 F.3d 1354, 1359 (Fed. Cir. 2001) (“if the scope of a claim would be reasonably ascertainable by those skilled in the art, then the claim is not indefinite”).

constitute or explain a claim limitation.”); *Baxa Corp. v. McGaw Inc.*, 981 F. Supp. 1348, 1359 (D. Colo. 1997) (describing a preamble as ambiguous, but not finding the claims indefinite).

#### **IV. CONCLUSION**

For the foregoing reasons, Anascape respectfully requests that the Court adopt Anascape’s proposed constructions of the disputed claim terms of the Microsoft & Nintendo-Infringed Patents and refuse the Defendants’ repeated invitations to import inappropriate limitations from the specification.

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Respectfully submitted,

**McKOOL SMITH, P.C.**

/s/ Sam Baxter

Sam Baxter  
Lead Attorney  
Texas State Bar No. 01938000  
sbaxter@mckoolsmith.com  
P.O. Box O  
505 E. Travis, Suite 105  
Marshall, Texas 75670  
Telephone: (903) 927-2111  
Facsimile: (903) 927-2622

Theodore Stevenson, III  
Texas State Bar No. 19196650  
[tstevenson@mckoolsmith.com](mailto:tstevenson@mckoolsmith.com)  
Luke F. McLeroy  
Texas State Bar No. 24041455  
lmcleroy@mckoolsmith.com  
McKool Smith, P.C.  
300 Crescent Court, Suite 1500  
Dallas, Texas 75201  
Telephone: (214) 978-4000  
Telecopier: (214) 978-4044

Robert M. Parker  
Texas State Bar No. 15498000  
rmparker@pbatyler.com  
Robert Christopher Bunt  
Texas State Bar No. 00787165  
rcbunt@pbatyler.com  
Charles Ainsworth  
Texas State Bar No. 00783521  
charley@pbatyler.com  
Parker, Bunt & Ainsworth P.C.  
100 E. Ferguson Street, Suite 1114  
Tyler, Texas 75702  
Telephone: (903) 531-3535  
Telecopier: (903) 533-9687

**ATTORNEYS FOR PLAINTIFF  
ANASCAPE, LTD.**

**CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing document was served on counsel of record via ECF or U.S. Mail on this 4th day of May, 2007.

/s/ Luke F. McLeroy \_\_\_\_\_  
Luke F. McLeroy