

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

ZEPP LABS, INC.,  
Petitioner,

v.

BLAST MOTION, INC.,  
Patent Owner.

---

Case IPR2016-00674  
Patent 9,039,527 B2

---

Before MICHAEL W. KIM, RAMA G. ELLURU, and  
MIRIAM L. QUINN, *Administrative Patent Judges*.

QUINN, *Administrative Patent Judge*.

DECISION  
Denying Institution of *Inter Partes* Review  
37 C.F.R. § 42.108

## I. INTRODUCTION

### A. *Background*

Zepp Labs, Inc. (“Petitioner”) filed a Petition to institute an *inter partes* review of claims 1–3, and 14 of U.S. Patent No. 9,039,527 B2 (Ex. 1001, “the ’527 patent”). Paper 1 (“Pet.”). Blast Motion, Inc. (“Patent Owner”) filed a Preliminary Response (Paper 7; “Prelim. Resp.”).

We have jurisdiction under 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted unless the information presented in the Petition shows “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” Upon consideration of the Petition and Preliminary Response, we determine that the information presented in the Petition does not demonstrate a reasonable likelihood that Petitioner would prevail in showing that claims 1–3 and 14 are unpatentable.

### B. *Related Proceedings*

Petitioner and Patent Owner identify the following district court proceedings concerning the ’527 patent: *Blast Motion, Inc. v. Zepp Labs, Inc.*, No 3:15-cv-00700 (S.D. Cal.). Pet. 2; Paper 5, 2.

Petitioner and Patent Owner identify further the following related patents, for each of which Petitioner has filed a respective *inter partes* review: U.S. Patent No. 8,903,521 (IPR2016-00672); U.S. Patent No. 8,941,723 (IPR2016-00675); U.S. Patent No. 8,905,855 (IPR2016-00676); U.S. Patent No. 8,944,928 (IPR2016-00677).

### C. *The ’527 Patent*

The ’527 patent is titled “Broadcasting Method for Broadcasting Images with Augmented Motion Data,” (Ex. 1001, [54]) and is directed to a:

A broadcasting method for broadcasting images with augmented motion data, which may utilize a system having at least one camera, a computer and a wireless communication interface. The system obtains data from motion capture elements, analyzes data and optionally stores data in database for use in broadcasting applications, virtual reality applications and/or data mining. The system also recognizes at least one motion capture data element associated with a user or piece of equipment, and receives data associated with the motion capture element via the wireless communication interface. The system also enables unique displays associated with the user, such as 3D overlays onto images of the user to visually depict the captured motion data. Ratings, compliance, ball flight path data can be calculated and displayed, for example on a map or timeline or both. Furthermore, the system enables performance related equipment fitting and purchase.

Ex. 1001, Abstract.

*D. Illustrative Claim*

Of the challenged claims, claims 1 and 14 are independent. Claim 1 is illustrative of the claimed subject matter and is reproduced below:

1. A broadcasting method for broadcasting images with augmented motion data comprising:  
capturing one or more images via at least one camera wherein said one or more images are associated with at least one motion capture element or a user that is associated with said at least one motion capture element or both said at least one motion capture element and said user;  
receiving said one or more images at a computer or via a communication interface coupled with said computer;  
receiving motion capture data from said at least one motion capture element via said communication interface coupled with said computer;  
receiving said motion capture data after a communications link to said at least one motion capture element is available and capable of receiving information over said communication interface;

receiving said motion capture data after an event or periodically requesting said motion capture data from said at least one motion capture element;

recognizing said at least one motion capture element associated with said user or piece of equipment and associating said at least one motion capture element with assigned locations on said user or said piece of equipment based on user input from said user;

analyzing said motion capture data to form motion analysis data;

drawing

- a three-dimensional overlay onto at least one avatar or at least one of said one or more images of said user or both,
- a rating onto said at least one avatar or said at least one of said one or more images of said user or both,
- at least one power factor value onto said at least one avatar or said at least one of said one or more images of said user or both,
- a calculated ball flight path onto said at least one avatar or said at least one of said one or more images of said user or both,
- a time line showing points in time along a time axis where peak values occur onto said at least one avatar or said at least one of said one or more images of said user or both,
- an impact location of a ball on said piece of equipment onto said at least one avatar or said at least one of said one or more images of said user or both,
- a slow motion display of the user shown from around the user at various angles at normal speed onto said at least one avatar or said at least one of said one or more images of said user or both, or

any combination thereof associated with said motion analysis data;

and,

broadcasting said at least one avatar or said one or more images or both to a multiplicity of display devices.

*E. Asserted Grounds of Unpatentability*

Petitioner challenges claims 1–3, and 14 on the following grounds.

Pet. 4, 25–52.

| Reference(s)                                                                                           | Basis    | Challenged Claims |
|--------------------------------------------------------------------------------------------------------|----------|-------------------|
| Mahajan, <sup>1</sup> Edis, <sup>2</sup> Boyd, <sup>3</sup> Oleson, <sup>4</sup> and Otto <sup>5</sup> | § 103(a) | 1 and 2           |
| Majahan, Edis, Boyd, Oleson, Otto, and Dugan <sup>6</sup>                                              | § 103(a) | 3                 |
| Mahajan, Edis, Boyd, and Oleson <sup>7</sup>                                                           | § 103(a) | 14                |

---

<sup>1</sup> U.S. Patent Application Pub. No. 2006/0025229 A1, pub. Feb. 2, 2006 (Ex. 1005) (“Mahajan”).

<sup>2</sup> U.S. Patent Application Pub. No. 2010/0144414 A1, pub. June 10, 2010 (Ex. 1007) (“Edis”).

<sup>3</sup> U.S. Patent No. 8,956,238 B2 (Ex. 1009) (“Boyd”).

<sup>4</sup> U.S. Patent Application Pub. No. 2009/0048044 A1, pub. Feb. 19, 2009 (Ex. 1011) (“Oleson”).

<sup>5</sup> Chris Otto, et al., *System Architecture of a Wireless Body Area Sensor Network for Ubiquitous Health Monitoring*, 1 JOURNAL OF MOBILE MULTIMEDIA 4 (2006) (Ex. 1012) (“Otto”).

<sup>6</sup> U.S. Patent Application Pub. No. 2008/0085778 A1, pub. Apr. 10, 2008 (Ex. 1008) (“Dugan”).

<sup>7</sup> The Petition is inconsistent in identifying the ground applicable to claim 14. In the section “Identification of Claims Being Challenged,” Petitioner states that claim 14 is challenged on the basis of Mahajan, Edis, Boyd, and Otto. Pet. 4. This statement is different from the assertion that limitations “[14A] through [14H] [are] Disclosed by Mahajan, Edis, Boyd, and Oleson. *Id.* at 52. The Petition maps the limitations of claim 14 to corresponding limitations in claims 1 and 2, except limitation [1G], for which Petitioner

Petitioner also provides a Declaration from Dr. Steven M. Nesbit (“Nesbit Declaration”). Ex. 1003.

## II. ANALYSIS

### A. Claim Construction

In an *inter partes* review, a claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears. 37 C.F.R. § 42.100(b); *see Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (holding that 37 C.F.R. § 42.100(b) “represents a reasonable exercise of the rulemaking authority that Congress delegated to the . . . Office”). Under the broadest reasonable construction standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set forth in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). We must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

Petitioner proffers proposed claim constructions for two claim terms: avatar and broadcasting. Pet. 10–11. Patent Owner asserts that it is unnecessary for the Board to construe the terms because to determine

---

raises *Otto*. *Id.* Therefore, we understand the identification of the ground at page 4 of the Petition to be a typographical error, where Otto is not part of the ground, but Oleson is.

whether to institute, based on Patent Owner's arguments, does not hinge on the constructions for these terms. Prelim. Resp. 5. We agree with Patent Owner. We determine that no express construction of any claim terms is necessary.

*B. Unpatentability of Independent Claims 1 and 14*<sup>8</sup>

Claims 1 and 14 recite that the broadcasting method comprises “receiving said motion capture data after an event or periodically requesting said motion capture data from said at least one motion capture element.” Ex. 1001, 43:1–4; 45:44–46. Petitioner asserts that this limitation includes two alternatives, with Mahajan disclosing the first alternative (receiving said motion capture data after an event), and Oleson disclosing the second alternative (periodically requesting said motion capture data from said at least one motion capture element). Pet. 31–32. Petitioner argues that “[i]t would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Oleson and Mahajan. Pet. 33 (citing Ex. 1003 ¶¶ 134–136). A brief overview of Mahajan and Oleson follows.

*1. Mahajan (Ex. 1005)*

Mahajan is directed to motion tracking and analysis. Ex. 1005 ¶ 2. More specifically, Mahajan discloses:

The present invention provides for an orientation and position tracking system in three-dimensional space installed on or in a moveable object that utilizes inertial and other sensors for determining real-time motion parameters and real-time wireless transmission of that motion information to an external computer system (including PDA, cellular phone, or over a network).

---

<sup>8</sup> The asserted grounds regarding claims 1 and 14 differ in the inclusion of Otto in the ground against claim 1, but not for claim 14. See *supra* n.7.

Ex. 1005 ¶ 30. According to Mahajan, the information can then be displayed and presented to the user through a variety of means, including audio, visual, and tactile. Ex. 1005 ¶ 8. For example, “[i]n one embodiment, the present invention provides for an intelligent golf club . . . that provides golfers with real-time, precise and dynamically presented data, including swing analysis.” Ex. 1005 ¶ 30.

## 2. *Oleson (Ex. 1011)*

Oleson is titled “Sports Electronic Training System with Sport Ball, and Applications Thereof.” Ex. 1011, [54]. Oleson describes one embodiment where a mobile phone sends a motion monitor a message directing the motion monitor to switch from low-power mode to active mode. *Id.* ¶ 85. In one embodiment, the mobile phone is required to send periodically a message to the motion monitor telling it to remain in active mode. *Id.* ¶ 86. Oleson further describes that there are a number of known standard protocols and proprietary protocols suitable for implementing a wireless personal area network (WPAN). *Id.* ¶ 87.

## 3. *Analysis*

Patent Owner argues that the combination of Mahajan and Oleson does not disclose receiving motion capture data “after an event” or “periodically requesting” that data from a motion capture element. Prelim. Resp. 12–18. We agree with Patent Owner.

Petitioner summarily argues that Mahajan suggests “periodically connecting to receive data.” Pet. 32 (citing Ex. 1005 ¶ 118). The argument is conclusory, without explanation, and, thus, is insufficient to support Petitioner’s assertion. The Mahajan embodiment on which Petitioner relies discloses a multi-pitcher embodiment. *Id.* As Patent Owner explains

(Prelim. Resp. 15–16), however, the cited disclosure explains that the Catcher cycles through transmission channels to listen to various Pitchers. Ex. 1005 ¶ 118. Petitioner does not explain adequately how cycling through transmissions teaches or suggests requesting data.

Petitioner also argues that Mahajan discloses that data may be transmitted after an “event,” and refers to Mahajan’s disclosure that “[a]fter you have swung the iClub, data is wirelessly transmitted to your hand held laptop, cell phone or other electronic device.” Pet. 32 (citing Ex. 1005 ¶ 63). As Patent Owner explains (Prelim. Resp. 14), however, Mahajan expressly teaches real-time transmission of data from the microcontroller to the software running on the receiving computer. See Ex. 1005 ¶ 53. After the computer receives the sensor data from the motion capture element, the receiving computer determines whether the incoming data represents a swing event. *Id.* at ¶ 57. Thus, the receiving computer receives the data before the system has determined that an “event” has occurred. Petitioner does not explain sufficiently how Mahajan, which expressly describes a system predicated on real-time transmission, teaches or suggests receiving data “after an event or periodically requesting said motion capture data.”

In addition, Petitioner refers to the disclosure in Oleson of a sensor transmitting data to a mobile phone where the “mobile phone must periodically transmit a message to the motion sensor to prevent the sensor from entering low-power mode,” and that “while in active mode, the motion sensor periodically transmits data to the mobile phone.” Pet. 32 (citing Ex. 1011, ¶¶ 76, 85, 86). We agree with Patent Owner (Prelim. Resp. 17–18) that the Petition does not sufficiently address why a skilled artisan would modify Mahajan’s real-time transmitting microcontroller to

implement the cited aspects of Oleson. *See* Pet. 33. Petitioner’s articulation that the references have similarities, such as Oleson’s field of quantifying sports performance, and that it would have been an “obvious design choice” to combine their teachings provides insufficient facts and reasons to combine.

Accordingly, we determine that Petitioner has not established a reasonable likelihood of prevailing with respect to claim 1, and the remaining dependent challenged claims (claims 2 and 3). Claim 14 recites the same limitation, and Petitioner relies on the same arguments and evidence presented with respect to claim 1. *See* Pet. 52 (referring, for claim 14, to the corresponding limitations of claim 1).

#### *G. Conclusion*

For the foregoing reasons, we are not persuaded that Petitioner has met its burden of showing a reasonable likelihood that claims 1–3 and 14 are unpatentable.

### III. ORDER

It is hereby ORDERED that the Petitioner is *denied*, and no trial is instituted.

IPR2016-00674  
Patent 9,039,527 B2

PETITIONER:

Hector Ribera  
FENWICK & WEST LLP  
[Hribera-ptab@fenwick.com](mailto:Hribera-ptab@fenwick.com)

PATENT OWNER:

Michael Rosato  
Matthew Argenti  
James Yoon  
WILSON SONSINI GOODRICH & ROSATI  
[mrosato@wsgr.com](mailto:mrosato@wsgr.com)  
[margenti@wsgr.com](mailto:margenti@wsgr.com)  
[jyoon@wsgr.com](mailto:jyoon@wsgr.com)