

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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EARLY WARNING SERVICES, LLC,

Petitioner,

v.

INTELLECTUAL VENTURES II, LLC,

Patent Owner.

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Case No. IPR2024-01221

U.S. Patent No. 7,314,167

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**PATENT OWNER'S SUR-REPLY**

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## PATENT OWNER'S EXHIBIT LIST

|        |                                                                                                                                                                                                                                                                                                       |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EX2001 | Declaration of Kai Johnson                                                                                                                                                                                                                                                                            |
| EX2002 | Resume of Kai Johnson                                                                                                                                                                                                                                                                                 |
| EX2003 | <i>“Embedding Of Any Type Of Data In Images Based On A Human Visual Model And Multiple-Based Number Conversion,”</i> Da-Chun Wu and Wen-Hsiang Tsai, Pattern Recognition Letter, Volume 20, Issue 14, December 1999, Pages 1511-1517                                                                  |
| EX2004 | <i>“Lossless Generalized-LSB Data Embedding,”</i> Celik, Mehmet Utku, et al., <i>IEEE transactions on image processing</i> 14.2 (2005): 253-266                                                                                                                                                       |
| EX2005 | <i>“Lossless Data Embedding For All Image Formats,”</i> Fridrich, Jessica, Miroslav Goljan, and Rui Du. In <i>Security and watermarking of multimedia contents IV</i> (Vol. 4675, pp. 572-583). SPIE, 2002                                                                                            |
| EX2006 | <i>Embedding Data in 3D Models</i> , R. Ohbuchi et al., IBM Japan Tokyo Research Laboratory, Interactive Distributed Multimedia Systems and Telecommunication Services: 4th International Workshop, IDMS'97 Darmstadt, Germany, September 10–12, 1997 Proceedings 4, Springer Berlin Heidelberg, 1997 |
| EX2007 | <i>Embedding Biometric Identifiers In 2D Barcodes For Improved Security</i> , Noore, Afzel, Nikhil Tungala, and Max M. Houck. <i>Computers &amp; Security</i> 23.8 (2004): 679-686                                                                                                                    |
| EX2008 | Data hiding in image and video. II. Designs and applications,” Wu, Min, Heather Yu, and Bede Liu. <i>IEEE Transactions on Image Processing</i> 12.6 (2003): 696-705                                                                                                                                   |
| EX2009 | Symbol SPT 1800 Series Product Reference Guide                                                                                                                                                                                                                                                        |
| EX2010 | Symbol SPT 1700 Series Product Reference Guide                                                                                                                                                                                                                                                        |
| EX2011 | Introduction to Bar Codes for the Automated Laboratory                                                                                                                                                                                                                                                |
| EX2012 | Image Definition - Merriam Webster                                                                                                                                                                                                                                                                    |
| EX2013 | FDIC Bulletin                                                                                                                                                                                                                                                                                         |
| EX2014 | Supplemental Declaration of Kai Johnson                                                                                                                                                                                                                                                               |

|        |                                                                                                                                                                                   |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EX2015 | ISO/IEC 15420-2000 standard                                                                                                                                                       |
| EX2016 | Ralston, A., & Reilly, E. D. (Eds.). (1993). <i>Encyclopedia of computer science</i> (3rd ed.). Van Nostrand Reinhold. p. 369                                                     |
| EX2017 | Advanced Encryption Standard (AES), 2001                                                                                                                                          |
| EX2018 | Reading QR Codes Without a Computer                                                                                                                                               |
| EX2019 | <i>American National Standard Code for Information Interchange</i> , American National Standards Institute, Inc.                                                                  |
| EX2020 | T. Pavlidis, J. Swartz and Y. Wang (Symbol Technologies), “Fundamentals of Bar Code Information Theory,” <i>Computer</i> 23.4 (1990): 74-86                                       |
| EX2021 | U.S. Patent No. 5,140,146, entitled “Bar Code Symbol Reader With Modulation Enhancement”                                                                                          |
| EX2022 | U.S. Patent 5,418,862, entitled “Method and Apparatus for Detecting Artifact Corners in Two-Dimensional Images”                                                                   |
| EX2023 | Ohbuchi, Eisaku, Hiroshi Hanaizumi, and Lim Ah Hock. “Barcode readers using the camera device in mobile phones.” <i>2004 International Conference on Cyberworlds</i> . IEEE, 2004 |
| EX2024 | U.S. Patent No. 7,137,555                                                                                                                                                         |
| EX2025 | U.S. Patent No. 7,490,774                                                                                                                                                         |
| EX2026 | U.S. Patent No. 7,637,430                                                                                                                                                         |
| EX2027 | “Embedded” definition and meaning from Dictionary.com, <a href="https://www.dictionary.com/browse/embedded">https://www.dictionary.com/browse/embedded</a>                        |
| EX2028 | “Embedded” definition and meaning from Merriam-Webster, <a href="https://www.merriam-webster.com/dictionary/embedded">https://www.merriam-webster.com/dictionary/embedded</a>     |
| EX2029 | Declaration of Dr. Kevin Berisso                                                                                                                                                  |
| EX2030 | CV of Dr. Kevin Berisso                                                                                                                                                           |

**I. THE REPLY FAILS TO ADDRESS THAT THE TERMS “IMAGE CAPTURE DEVICE” AND “CAPTURED IMAGE” HAD A WELL-ACCEPTED MEANING TO THOSE IN THE FIELD AT THE TIME OF THE ‘167 PATENT**

The Patent Owner Response (POR) provided overwhelming evidence that practitioners in the field used the terms “image capture device” and “captured image” only in connection with image-based readers. See, POR 10-13 and 26-30 and EX2029 (expert declaration) ¶¶66-76.<sup>1</sup> The Reply fails to engage with any of this evidence. The testimony of Patent Owner’s expert of how practitioners used these terms stands un rebutted, as Petitioner’s expert did not submit a reply declaration.

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<sup>1</sup> See also, EX2024, 1:19-2:9 (“conventional barcode readers use one of two general approaches .. a flying-spot laser scanning technique, or by using an imaging technique. In flying-spot laser scanning systems, a beam of light is swept across a target barcode, and the reflected and/or refracted light from the target is detected and processed to decode the barcode. In imaging barcode readers, an image of the barcode is typically captured using an array of pixels (CCD or CMOS, for example), and the captured image is processed to decode the barcode; EX2025, 3:4-49; EX2026, 1:19-47; EX2019, 3:4-49 (“Imaging-based bar code symbol readers have a number advantages over laser scanning based bar code symbol readers, ... Prior art imaging-based bar code symbol readers generally require capturing multiple frames of image data ... Prior art imaging-based bar code symbol readers generally require large arrays of LEDs in order to flood the field of view within which a bar code symbol might reside during image capture operations”); and EX2026, 1:19-47 (“Optical readers tend to fall into one of three classes: wand readers, laser scan engine optical readers and image sensor based optical readers. .. Laser scan engine based optical readers comprise a laser diode assembly generating a laser light beam, a moving mirror for sweeping the laser light beam across a decodable symbol ... Image sensor based optical readers comprise multielement image sensors such as CID, CCD, and CMOS image sensors and an imaging optic for focusing an image onto the image sensor”).

Instead of meeting Patent Owner’s evidence, the Reply offers an attorney argument that dissects the term “image capture device” into pieces and focuses solely on the meaning of “image” - referring to “image” as the so-called “root” term in “image capture device.” Reply, 4-5. These arguments miss the mark because the term “image capture device” as a whole had a well-understood meaning to practitioners in the field. Dissecting a term of art into its constituent parts does not alter the meaning to a POSITA of the term as a whole.

As part of its arguments dissecting “image capture device” into parts, the Reply argues that the ‘167 Patent uses the term “image” to refer to a “printed object or symbol—not to an image contained within an image capture device” and thus “the captured ‘image’ ... does not refer to an internal digitized version of the image.” Reply, 5-6 (emphasis in original). Not so. For example, the ‘167 Patent discloses “a digital camera for obtaining images.” EX1001, 2:53-54 (emphasis added); *see also*, 5:50-51 (“The image or stream of images may constitute a video”); 6:10-13 (disclosing the processor decoding “the captured image”); 6:18-19 (same). The captured image in the ‘167 Patent is a two-dimensional “image” (e.g., a frame or video) represented in the form of digital information that corresponds, e.g., to a printed barcode. While the ‘167 Patent may refer to the printed version of the barcode as an image, the patent makes clear that the digital representation of the barcode captured by the image capture device is also an image. In any event, even if

an analysis of the term “image” in *isolation* reflected a distinction between the printed “image” and the captured “image,” it does not change the fact that the term “image capture device” *as a whole* had a well-understood meaning to practitioners in the field that excluded laser-based barcode scanners.

Moreover, even if it were appropriate to dissect the phrase “image capture device” into its individual words, the result would not change. The evidence in the POR (at 26, note 1) demonstrates that an image is “a visual representation of something: such as (1) a likeness of an object produced on a photographic material [or] (2) a picture produced on an electronic display (such as a television or computer screen).” EX2012 Merriam Webster. The dictionary definition of image is consistent with the usage of that term in the ‘167 Patent which states that the image capture circuit “captures information on a still or moving image or a stream of images.” EX1001, 5:49-50 (emphasis added); EX2029, ¶69, note 4. During his deposition, Patent Owner’s expert confirmed that an image-capture device captures a *picture* and that it is *impossible* for a laser-based barcode scanner to even capture two-dimensional information like a picture:

Q. What is an image-capture device”

A. A device that uses electronics generally to capture an image, *capture a picture*.

\* \* \*

Q. Okay. And what sorts of devices can read two-dimensional barcodes?

A. For two-dimensional, you are limited to the imager-type scanners because you have to have that vertical component and a -- the term used in the -- in the report was a flying laser, a flying spot.

It's a laser scanner, it is not able to capture the information that a 2D matrix symbol has because it's not -- it's not designed that way.

Q. Okay.

A. It just doesn't work.

Q. So is it your testimony that it is impossible to use a laser scanner to read a two-dimensional barcode

Attorney Golub: Objection Form.

A. Yes.

Q. Impossible?

A. Yes.

EX1048, 40:1-4 (emphasis added) and 95:17-96:13 (emphasis added).<sup>2</sup> Again, the Reply does not engage with any of this evidence, which stands unrebutted.

In summary, the Reply fails to rebut the overwhelming evidence demonstrating that a POSITA would have understood the recitation in claims 1 and 19 of an “image capture device configured to capture an image” in combination with a processor configured to “generate an output based on the information embedded

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<sup>2</sup> The Reply (at 7-8) quotes Dr. Berisso out of context (at EX1048, 163:1-6) and wrongly suggests that he testified “that a laser-based bar code scanner is a device that can “capture” a bar code image -- just like an imaging-based barcode scanner.” As is clear from the context, the prior questions were tied to Petitioner’s confusing contention that the printed barcode image and captured image were somehow different. See, EX1048, 162:12-25. At the end of the line of questioning, after Petitioner’s counsel stated that he “just want[ed] to make sure that I understand” Dr. Berisso’s position, Dr. Berisso agreed that “a laser barcode scanner can scan an image.” *Id.*, 163:25-164:4 (emphasis added). Scanning an image (by sweeping a laser across it in one dimension) is not the same as capturing a digital representation of an image (or picture) which requires information in two dimensions. Dr. Berisso was unequivocal that it is impossible for a laser-based barcode scanner to capture such two-dimensional information. *Id.*, 95:17-96:13.

in the image,” to be referring to an imaging-based reader and not a laser-based barcode scanner. EX2029, ¶76. Similarly, a POSITA would have understood the recitation in claims 23, 29, and 43 of “configuring a portable device to ... capture an image” and “generate an output based on the information embedded in the [captured] image” to be referring to an imaging-based reader and not a laser-based barcode scanner. *Id.*

## II. THE PETITION’S MAPPINGS TO WANG ALL REQUIRE THE “INFORMATION EMBEDDED IN THE IMAGE” TO BE DATA FROM BARCODES OR BARCODE INFORMATION

While, as discussed in Section IV, the Reply pivots to a new theory not presented in the Petition, the Petition in Grounds 1-3 mapped the “information embedded in the image” set forth in the challenged independent claims solely to information in barcodes in Wang. For example, in Ground 1, the Petition mapped the “information embedded in the image” recited in Element [1f] solely to “data in barcodes” or “barcode information” in Wang:

|                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>[1f] generate an output based on <u>the information embedded in the image</u> and the predetermined information; and</p> | <p>Wang describes digitally signed “receipts” as outputs, which are based on <u>image information (data from barcodes)</u> and predetermined information (private key). EX1002 at 62-63.</p> <p>After “agree[ing] to pay for the item, the user can approve the transaction by pressing the button on the phone....” The device then generates a digitally signed receipt as an output: “[T]he PEAD can generate the receipt....” [0115].</p> |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>The digitally signed receipt is based on <u>information embedded in an image (barcode information)</u>: “[T]he PEAD can generate the receipt...by querying the item price using the barcode as the index for price lookup table....” <i>Id.</i>; EX1002 at 78.</p> <p>The digitally signed receipt is also based on the predetermined information (private key): “[T]he PEAD user can sign the receipt electronically using PEAD....” [0115]. “[T]he PEAD may be employed to ‘sign’ any computer file for authentication purposes” and indicates that authentication is based on encryption “using the user’s private key.” [0085]. Thus, the private key (predetermined information) is utilized to digitally sign the receipt. EX1002 at 79-81.</p> |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Petition, 35 (emphasis added). In Ground 1, the Petition mapped the “information embedded in the image” in Element [23f] identically to Element [1f] as reproduced above. Petition, 40.

Similarly, in Ground 2, the Petition mapped the “information embedded in the image” recited in Element [1f] solely to “barcode data” in Wang:

|                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>[1f] generate an output based on <u>the information embedded in the image</u> and the predetermined information; and</p> | <p>Wang describes that the PEAD can generate “transaction approval data” (an output) in response to the user agreeing to a transaction. [0075]-[0083], [0115].</p> <p><u>The output is based on information embedded in the image:</u></p> <p>To approve and complete a transaction, the price of the item being purchased is required. [0115]. The price of the item is generated based on <u>barcode data (information embedded in an image)</u>: “The cellular phone would display the price of the item the user entered (or scanned in). If the user agrees to pay for</p> |
|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>the item, the user can approve the transaction by pressing the button on the phone.” <i>Id.</i> Such approval, which is based on <u>the embedded barcode image information</u>, results in the generation of “transaction approval data.” [0076], [0115] (stating that “the approval process...is described in [related] U.S. Pat. 5,917,913,”<sup>10</sup> which describes the generation of “transaction approval data” in response to approval of a transaction). <i>Id.</i> Thus, the transaction approval data (output) is based on price <u>information embedded in a barcode image</u>. EX1002 at 78.</p> |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Petition, 46 (emphasis added).

In Ground 3, the Petition’s mapping of Elements [19f] and [23f] to Wang simply refer back to the Petition’s mapping of Elements [1f] and [23f] to Wang in Ground 1 which, as demonstrated above, mapped the “information embedded in the image” recited in these elements solely to “data from barcodes” or “barcode information” in Wang. Petition, 52-53.

Thus, in all of the Petition’s mappings in Grounds 1-3, the Petition mapped the “information embedded in the image” solely to information in barcodes in Wang.

### **III. THE MAPPINGS IN THE PETITION FOR GROUNDS 1-3 FAIL BECAUSE WANG FAILS TO EXPRESSLY OR INHERENTLY DISCLOSE AN IMAGE-BASED BARCODE READER**

Wang discloses two readers: a barcode scanner and an optical character recognition (OCR) reader. Of those two readers, the only one even capable of extracting embedded information from a barcode is Wang’s barcode scanner. As

Patent Owner's expert testified, an OCR scanner is incapable of recognizing a barcode:

Q. Could you use an OCR scanner to interpret this barcode?

ATTORNEY GOLUB: Objection.

THE WITNESS: No.

BY ATTORNEY KRIEGER:

Q. Why not?

A. An OCR scanner is a task-specific device that is looking for characters to optically recognize. It would look at this picture, say there are no characters there, and so nothing would happen.

EX1048, 169:20-170:5 (emphasis added). Since Wang's OCR scanner is incapable of reading a barcode, the Petition's mappings in Grounds 1-3 specifying that the "information embedded in the image" be information extracted from a barcode are left with attempting to map Wang's barcode reader to the "image capture device" recited in the challenged claims. At this point, however, the mappings in the Petition fall apart, because Wang fails to expressly or inherently disclose that its barcode reader is an imaging-based barcode reader, as required by the challenged independent claims.<sup>3</sup> Thus, in Ground 1-3, the mappings in the Petition fail to demonstrate that all of the limitations of the challenged independent claims are met.

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<sup>3</sup> The Reply does not dispute Patent Owner's evidence in the POR that Wang fails to expressly or inherently disclose an imaging-based barcode reader. POR, 38; EX2029, ¶29. Moreover, in connection with the term "barcode scanner" used in [0115] of Wang, Patent Owner's expert explained that practitioners would have understood the term "barcode scanner" to mean a linear barcode scanner (EX1048, 97:2-98:2) and that a linear barcode scanner was a laser-based scanner, rather than an image capture device. *Id.*, 101:11-22

**IV. THE THEORY ADVANCED IN THE REPLY THAT HUMAN-READABLE ALPHANUMERIC CHARACTERS READ BY WANG'S OPTICAL CHARACTER RECOGNITION (OCR) READER ARE "INFORMATION EMBEDDED IN THE IMAGE" IS AN IMPERMISSIBLE SHIFT IN THEORY**

Cognizant that the mappings set forth in the Petition in Grounds 1-3 were deficient, the Reply argues for the first time that human-readable alphanumeric characters detected by Wang's optical character recognition (OCR) reader are "information embedded in the image." Reply, at 9-10 and 12-13. This is a new theory not set forth in the Petition. This new theory must be rejected because it represents an impermissible change in theory.

**V. EVEN IF THE BOARD WERE TO ENTERTAIN PETITIONER'S NEW THEORY THAT ALPHANUMERIC CHARACTERS RECOGNIZED BY WANG'S OCR READER ARE "INFORMATION EMBEDDED IN THE IMAGE," DEPENDENT CLAIMS 7 AND 29 ARE WITHOUT QUESTION PATENTABLE OVER WANG**

Dependent claims 7 and 29 further specify that "the image having information embedded therein" recited in independent claims 1 and 23, respectively, "includes a barcode." Petitioner's new theory, however, fails to map information from barcode images to "the information embedded in the image" and instead maps human-readable alphanumeric characters recognized by an OCR reader to "the information embedded in the image." It is undisputable that if the "image" is human-readable alphanumeric characters recognized by an OCR reader, as argued in Petitioner's

new theory, then “the image having information embedded therein” fails to include a barcode as required by claims 7 and 29.

As Patent Owner’s expert testified during his deposition, an OCR scanner is incapable of recognizing a barcode. EX1048, 169:20-170:5. Given that an OCR reader cannot even read a barcode, Petitioner’s new theory predicated on Wang’s OCR reader fails to meet the requirements of dependent claims 7 and 29 specifying that the image capture device capture an image with a barcode “having information embedded therein” where such information is used to generate an output, as required by claims 7 and 29. Thus, Petitioner’s new theory fails to render dependent claims 7 and 29 unpatentable in Grounds 1-3 based on Wang.<sup>4</sup>

## **VI. PETITIONER’S NEW CLAIM CONSTRUCTION EQUATING ALPHANUMERIC CHARACTERS RECOGNIZED BY WANG’S OCR READER WITH “INFORMATION EMBEDDED” IN THE IMAGE MUST BE REJECTED**

### **A. Petitioner’s Proposed Construction Reads “Embedded” Out Of The Claims**

Claim 1 recites in pertinent part:

an image capture device configured to capture an image, the image having information embedded therein including ...

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<sup>4</sup> The Reply (at 5) raises a claim differentiation argument based on the fact that dependent claims 7 and 29 “recite that the ‘image includes a barcode.’” However, having raised that point, the Reply fails to explain how its new theory meets the additional limitations of these dependent claims.

The expansive reading in the Reply of “embedded information” as “any information ‘derived from’ an image” including human-readable alphanumeric characters, renders the claim term “embedded” a nullity. Under Petitioner’s construction, it is as if the claim read “the image having information therein” as opposed to what the claim actually says, which is “the image having information embedded therein.” Put another way, the claim language dictates that simply having an image with information in it is insufficient: rather, the claim language requires having an image with “embedded information” therein. Ascribing no meaning to “embedded” violates the basic tenet of claim construction that all terms have meaning.

In attempting to expand the concept of “embedded information” to human-readable alphanumeric characters, the Petition argues for the first time in the Reply that the plain and ordinary meaning of “embedded” is “any information ‘derived from’ an image.” Reply, 12 (emphasis added). In addition to completely lacking support in the record or otherwise, this new construction fails to ascribe any meaning to “embedded.” The new construction simply requires that information come from the image, which is no different from simply saying that the image has information in it. Lacking from Petitioner’s new construction is the attribution of any meaning to the term “embedded.”

**B. The Specification Of The ‘167 Patent Does Not Support Petitioner’s Proposed Construction Of “Embedded” As Including Human-Readable Alphanumeric Characters**

The Reply (at 12, note 5) incorrectly argues that “derived from” is “the better construction [for “embedded”] since it is used multiple times in the challenged patent.” In context, here is how the ‘167 Patent uses “derived from”:

... The correct confirmation signature can be derived from the information embedded in the image or stream of image. EX1001, 9:23-26 (emphasis added).

Significantly, the ‘167 Patent does not disclose simply deriving a signature from information in the image (as the Reply suggests), but rather discloses deriving a signature from information embedded in the image. The ‘167 Patent does not equate “derived” with information in general in an image, as the Reply suggests.

The Reply also incorrectly suggests that “the ‘167 Patent itself gives several examples of alphanumeric characters that can contain embedded information.” Reply, at 9, *citing* EX1001, 7:55-59. Not so. While the cited portion of the specification discloses a “nonce,” it does not say that the nonce is presented in the form of human-readable alphanumeric characters. On the contrary, it would have been clear to a POSITA reading the ‘167 Patent that the nonce would have been presented as a barcode. In connection with the digital signature referenced in the ‘167 Patent a few lines below the nonce (EX1001, 7:60), Patent Owner’s expert testified that the digital signature disclosed in the ‘167 Patent would not have been

presented in the form of alphanumeric characters -- but rather in the form of a barcode. EX1048, 65:8-67:6 and 67:23-25 (explaining that the patent is teaching information being presented as a barcode and “doesn’t clarify other options”). There is no evidence in the record (and particularly no testimony from Petitioner’s expert) that the nonce referred to in the ‘167 Patent is presented in the form of alphanumeric characters (as opposed to a barcode.)

**C. The Institution Decision And The Purvis Declaration Do Not Support Petitioner’s Proposed Construction Of “Embedded” As Including Human-readable Alphanumeric Characters**

In support of its new claim construction arguments, the Reply (at 12) cites to the Institution Decision (at 15) and the Purvis Declaration (EX1036) at ¶10. However, neither citation supports Petitioner’s expansive reading of “embedded information” as “any information ‘derived from’ an image” including human-readable alphanumeric characters, because both citations refer exclusively to information derived from a barcode (which both parties agree functions to embed information in an image). *See*, Institution Decision, 15 (“Mr. Purves testifies, that as shown in blocks 1010 and 1110, ‘the transaction information derived from the barcode involves only ...”) and EX1036, ¶10 (“Rather, as shown in blocks 1010 and 1110 of the ‘167 patent, the transaction information derived from the barcode involves ...”). Neither citation remotely suggests that human-readable alphanumeric characters in an image are “embedded information,” as the Reply suggests.

**D. The Testimony Of Patent Owner's Expert Does Not Support Petitioner's Proposed Construction Of "Embedded" As Including Human-Readable Alphanumeric Characters**

Citing the deposition of Patent Owner's expert, the Reply incorrectly suggests that Patent Owner's expert conceded that "embedded information" in the context of the '167 Patent includes numeric information. Reply, at 9, *citing*, EX1048, at 72:21-23 and 25. The Reply fails to mention that the cited testimony was not about the '167 Patent, but rather "ring decoders you might get from a Cracker Jack box." Below is the testimony in context:

Q. Okay. Are you familiar -- I'm probably dating myself here. But are you familiar with, like -- it was actually probably before my time -- like, ring decoders you might get from a Cracker Jack box?

ATTORNEY GOLUB: Objection.

THE WITNESS: Unfortunately.

BY ATTORNEY KRIEGER:

Q. Okay. And how does that work?

A. The concept of a ring decoder is that you have a message that's been transposed, and you use the decoder ring by twisting it to get back to the original message.

Q. Okay. So, for example, a number might correspond to a letter. Is that fair to say?

A. Yes.

Q. Okay.

A. It's a substitution system.

Q. It's a substitution system where you're substituting something for a letter, correct?

A. Correct.

Q. Okay. In order to form a coded message, correct?

25 A. Correct.

EX1048, 70:24-71:25 (emphasis added). The Reply fails to explain how testimony about ring decoders in Cracker Jack boxes informs the meaning that a POSITA would have ascribed to “embedded information” in the ‘167 Patent.

Citing to a different portion of the deposition of Patent Owner’s expert, the Reply incorrectly alleges that Patent Owner’s expert “acknowledged that alphanumeric characters can contain embedded product information.” Reply, at 10 (emphasis added), *quoting*, EX1048, at 214:8-11. The quoted testimony, however, refers only to information in general -- and makes no mention of embedded information as recited in the challenged claims. Below is the quoted testimony:

Q. And isn’t it also true, then, that the numbers at the bottom of what is shown in Exhibit 1046 [(a UPC Barcode)] also contain product information?

A. Again, indirectly, yes.

This testimony does not refer to the term “embedded,” and therefore cannot be an acknowledgement “that alphanumeric characters can contain embedded product information,” as alleged in the Reply.

For all of the reasons set forth above, the expansive reading in the Reply of “embedded information” as “any information ‘derived from’ an image” including human-readable alphanumeric characters should be rejected.

**VII. NEITHER THE PETITION NOR THE REPLY ESTABLISH THAT WANG OR TAO EXPRESSLY OR INHERENTLY DISCLOSE HUMAN-READABLE NUMBERS UNDER THE BAR CODE SYMBOL**

Neither nor Wang nor TAO *expressly* disclose numbers underneath their barcodes. Moreover, as Patent Owner's expert testified, numbers underneath the bars and spaces are not required. Ex. 1048, and 131:20-21 and 137:3-10. Since such numbers are not required, neither Wang nor TAO *inherently* disclose human readable numbers beneath their barcodes. Thus, even if the Board were to adopt Petitioner's expansive reading of "embedded" information as including human-readable alphanumeric characters under a barcode, there is no evidence that either Wang or TAO have such numbers.

**VIII. THE REPLY CANNOT REDEFINE TAO IN A NEW MANNER THAT IS CONTRARY TO WHAT WAS SET FORTH IN THE PETITION**

With respect to Ground VI, the Board is presented with a narrow and well-defined question, namely, whether TAO *as defined in Exhibit 1005*, together with the other references relied upon in Ground VI, render obvious the challenged claims. Petitioner's attempt in the Reply to expand TAO to encompass materials outside of Ex. 1005—specifically, new reliance on pages 5-6 of Exhibit 1010—represent an impermissible effort to alter the scope of the instituted ground and must therefore be rejected.

### A. The Petition Defined TAO As Exhibit 1005 Only

There can be no question that the Petition defined TAO as EX1005. For example, the first sentence of Ground VI of the Petition stated:

Claims 1, 4, 5, 7, 23, 26, 27, 29, and 43 are obvious over TAO (EX1005) in view of PTM (EX1006) and Wang (EX1004), as explained below and in the following claim charts. Petition, 59 (emphasis added).

In addition, as shown below, every claim chart in the Petition referencing TAO defined TAO as EX1005:

#### Independent Claim 1

| Claim 1                                                                                    | TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Preamble 1] 1. An apparatus for providing a secure transaction, the apparatus comprising: | <p>“the <b>handheld tool</b>” is an apparatus. Ex. 1005 at 1.</p> <p>“<b>Taking orders from customers....</b>” is a transaction. <i>Id.</i></p> <p>“Our software runs on...PalmOS...and is licensed for use on <b>handheld devices made by palmOne (including the Treo...)</b>.” <i>Id.</i> at 3.</p> <p>The Treo “[r]equires a password to see any data...” indicating that it is <b>secure</b>. Ex. 1006 at 24, 129.</p> |

| Claim 1 | TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)                                                                                                                                                                                           |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | Wang discloses an apparatus for providing a <b>secure</b> transaction. “portable electronic authorization devices (PEADs) which eliminate the <b>security risks</b> associated with... approving <b>transactions...</b> ” Ex. 1004 at [0002]. |

| Claim 1 | TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)                                                                                                                                                                                           |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | Wang discloses an apparatus for providing a <b>secure</b> transaction. “portable electronic authorization devices (PEADs) which eliminate the <b>security risks</b> associated with... approving <b>transactions...</b> ” Ex. 1004 at [0002]. |

|                |                                                                                                                     |
|----------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Claim 1</b> | <b>TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)</b>                                                          |
|                | “[r]equires a password to see any data...” Ex. 1006 at 24, 129; Ex. 1002 at 148. A password is “input information.” |

|                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Claim 1</b>                                                                                                                | <b>TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)</b>                                                                                                                                                                                                                                                                                                                                                          |
| [1h] the output includes a digital signature to be used to signify authorization by the user with respect to the transaction. | <p>“As a further example, the PEAD may be employed to sign any computer file for authentication purposes (e.g., to authenticate the date or the user).” Ex. 1004 at [0085].</p> <p>A POSA would understand from TAO in view of Wang that the order of TAO may include a digital signature, as described in Wang, to provide verification that the order was created by an authorized user. Ex. 1002 at 150-156.</p> |

#### Dependent Claim 4

|                |                                                                                                                                                                                                                                                                                                                      |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Claim 4</b> | <b>TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)</b>                                                                                                                                                                                                                                                           |
| Element 4      | <p>“use on handheld devices made by palmOne (including the Treo” Ex. 1005 at 3.</p> <p>“Requires a <b>password</b> to see any data...” Ex. 1006 at 129.</p> <p>“require the <b>user to enter a password, to furnish fingerprints or a voice print, or other biometrics</b>” Ex. 1004 at [0073]. Ex. 1002 at 163.</p> |

#### Dependent Claim 5

|                                                                   |                                                                                                                                                                                                   |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Claim 5</b>                                                    | <b>TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)</b>                                                                                                                                        |
| 5. The apparatus of claim 1 wherein the output unit is a display. | <p>“the day’s <b>sales are summarized and displayed and/or printed.</b>” Ex. 1005 at 2-3.</p> <p>The day’s sales (e.g., orders) is an output that is presented on a display. Ex. 1002 at 164.</p> |

|                                                                   |                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Claim 7</b>                                                    | <b>TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)</b>                                                                                                                                                                                              |
| 7. The apparatus of claim 1 wherein the image includes a barcode. | <p><b>“barcode-scanning capability...a PalmOS handheld equipped with a barcode scanner”.</b> Ex. 1005 at 3.</p> <p>“point the scanner at the product, press the scan button, and the item is added to the order!” <i>Id.</i> at 1; Ex. 1002 at 165.</p> |

|                                                                      |                                                                                                                                    |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Claim 23</b>                                                      | <b>TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)</b>                                                                         |
| 23. A method of providing secure transaction, the method comprising: | <p><i>See</i> Ground 6, Element 1 preamble.</p> <p>TAO discloses a method for providing a secure transaction. Ex. 1002 at 166.</p> |

|                                                                                                                                        |                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>Claim 23</b>                                                                                                                        | <b>TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)</b>            |
| [23h] wherein the output includes a digital signature to be used to signify authorization by the user with respect to the transaction. | <i>See</i> Ground 6, Element 1h. <i>See also</i> Ex. 1002 at 150-156. |

#### **Dependent Claim 26**

|                                                                                                                                      |                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <b>Claim 26</b>                                                                                                                      | <b>TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)</b>              |
| 26. The method of claim 23 wherein the input information includes one of a personal identification number and biometric information. | <i>See</i> Ground 6, Claim 4 analysis. <i>See also</i> Ex. 1002 at 169. |

### Dependent Claim 27

| Claim 27                                                                                                 | TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)                                                                                           |
|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 27. The method of claim 23 further comprising:<br>configuring the portable device to display the output. | See Ground 6, Claim 5 analysis.<br><br>To display the order as taught by TAO, the device must be <b>configured</b> to do so. Ex. 1002 at 170. |

### Dependent Claim 29

| Claim 29                                                         | TAO (Ex. 1005), PTM (Ex. 1006), and Wang (Ex. 1004)              |
|------------------------------------------------------------------|------------------------------------------------------------------|
| 29. The method of claim 23 wherein the image includes a barcode. | See Ground 6, Claim 7 analysis. <i>See also</i> Ex. 1002 at 171. |

### Independent Claim 43

| Claim 43                      | TAO (Ex. 1005), PTM (Ex. 1006) and Wang (Ex. 1004)                                                                                                                                                                        |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Preamble 43                   | See Ground 6, Preamble 23 analysis.                                                                                                                                                                                       |
| Elements 43a-g<br>Element 43h | See Ground 6, Elements 23a-g analysis.<br><b>“software runs on...handheld devices made by palmOne (including the Treo...)”</b> Ex. 1005 at 1-2.<br><br>The Palm Treo is a cellular phone. Ex. 1006 at 1; Ex. 1002 at 172. |

Petition, 64-70. Thus, no less than 15 times the Petition defined TAO as EX1005 and only EX1005.

### B. The Institution Defined TAO As Exhibit 1005 And This Trial Is Therefore Limited To TAO As Defined By EX1005

Based on the definition in the Petition, the Institution Decision defined TAO as only EX1005:

<sup>7</sup> Wayback Machine Capture dated July 26, 2024 of Stevens Creek, *Take An Order!* (Aug. 25, 2004), <http://www.stevenscreek.com/palm/takeanorder.html> (retrieved from <https://web.archive.org/web/20040825011003/http://www.stevenscreek.com/palm/takeanorder.html>) (see Pet. 22, n3; Ex. 1034)) (Ex. 1005, “TAO”).

Institution Decision, 8, note 7 (emphasis added). Based on this clear definition of TAO, the Institution Decision instituted a Trial limited to “the unpatentability grounds asserted in the Petition” which defined TAO as only EX1005. Institution Decision, 46 (emphasis added). Thus, with respect to Ground VI, the only question presented in this Trial is limited to whether TAO as defined by EX1005 (together with the other references relied on in Ground VI) render the challenged claims obvious.

It bears emphasis that the present Trial is not a reexamination of the ‘167 Patent. As the United States Supreme Court explained in *SAS Institute Inc. v. Iancu*, 138 S. Ct. 1348, (2018), a reexamination is an “inquisitorial” process “led by the Patent Office.” By contrast, an *inter partes* review Trial is limited to the specific Grounds set forth in the Petition, where each Ground is limited to the specific prior art reference(s) identified in the Ground:

... Congress has supplemented litigation with various administrative remedies. The first of these was *ex parte* reexamination. Anyone, including the Director of the Patent Office, can seek *ex parte* reexamination of a patent claim. §§302, 303(a). Once instituted, though, an *ex parte* reexamination follows essentially the same inquisitorial process between patent owner and examiner as the initial Patent Office examination. §305. Later, Congress supplemented *ex parte* reexamination with *inter partes* reexamination. *Inter partes*

reexamination (since repealed) provided a slightly more adversarial process, allowing a third party challenger to submit comments throughout the proceeding. §314(b)(2) (2006 ed.) (repealed). But otherwise *it too followed a more or less inquisitorial course led by the Patent Office*. §314(a). Apparently unsatisfied with this approach, in 2011 *Congress repealed inter partes reexamination and replaced it with inter partes review*. See 35 U. S. C. §§311–319 (2012 ed.).

The new *inter partes* review regime looks *a good deal more like civil litigation*. At its outset, a party must file “a petition to institute an inter partes review of [a] patent.” §311(a). The petition “may request to cancel as unpatentable 1 or more claims of [the] patent” on the ground that the claims are obvious or not novel. §311(b); see §§102 and 103. In doing so, *the petition must identify “each claim challenged,” the grounds for the challenge, and the evidence supporting the challenge.* §312(a)(3). (*id.*, 138 S. Ct. at 1353-1354 (emphasis added)).

In contrast to the “inquisitorial process” used in reexaminations, the Supreme Court explained that the contours of an *inter partes* review must be guided *by the contours of the Petition*, which in this case, defined TAO as only EX1005:

... The statutory provisions before us deliver unmistakable commands. The statute hinges *inter partes* review on the filing of a petition challenging specific patent claims; *it makes the petition the centerpiece of the proceeding both before and after institution* ... (*id.*, 138 S. Ct. at 1358 (emphasis added)).

Thus, the question presented in this Trial is limited to the contours of the Petition and specifically, with respect to Ground VI, whether TAO *as defined by EX1005* (together with the other references relied on in Ground VI) meet all of the limitations of the challenged claims.

For the reasons set forth in the POR (at 43-45), the Petition failed to demonstrate that TAO defined as EX1005, together with the other references relied on in Ground VI, render any of the challenged claims unpatentable.

**IX. PETITIONER’S ATTEMPT IN THE REPLY TO EXPAND TAO TO INCLUDE INFORMATION BEYOND THAT SET FORTH IN EX1005 FAILS FROM AN EVIDENTIARY PERSPECTIVE AS WELL**

Cognizant of the fact that TAO as defined by EX1005 (together with the other references relied on in Ground VI) fail to meet all of the limitations of the challenged claims, the Reply attempts to supplement the TAO reference so defined with information on pages 5-6 of EX1010. Reply, 17-20. According to the Petition, clicking on a hyperlink in the TAO reference (EX1005) would have brought a user to the webpages depicted on pages 5-6 of EX1010.

As an initial matter, the Petition never even mentions pages 5-6 of EX1010. The Petition cites to EX1010 only four times (once on page 6 and three times on page 26). All four citations refer to pages of EX1010 other than pages 5-6 - not one of the citations even references pages 5-6 of EX1010. The statement in the Reply (at 19, note 9) that the new theory based on pages 5-6 of EX1010 “was presented in the Petition” and “appears to have been overlooked by Patent Owner” strains credulity. Patent Owner could not have overlooked Petitioner’s new theory, because it was not in the Petition.

Second, the TAO reference (defined as EX1005) as presented in the Petition was a pdf document with no working hyperlinks. The pdf fails to include any http code evidencing a hyperlink to pages 5-6 of EX1010. Nor do any of the Internet Archive Declarations make that connection. In fact, TAO (EX1005) is the subject of one Internet Archive Declaration (EX1034) and pages 5-6 of EX1010 are the subject of a different Internet Archive Declaration (EX1010). Absent is any testimony in these declarations that clicking on a so-called hyperlink in EX1034 would have brought a user to pages 5-6 of EX1010. In fact, these two Internet Archive Declarations do not even mention each other.<sup>5</sup> Simply put, there is no evidence that clicking on a hyperlink in TAO (EX1005) would have brought a user to pages 5-6 of EX1010. The assertion in the Reply that clicking on a hyperlink in TAO (EX1005) would have brought a user to pages 5-6 of EX1010 is limited to attorney argument, which is insufficient to carry Petitioner's burden which requires a preponderance of evidence supporting Petitioner's position.

Finally, there is a significant discrepancy between the webpages of Steven's Creek Software shown in Exhibit 1034 and the webpages shown in EX1010 that

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<sup>5</sup> The lack of an evidentiary connection between the pages of TAO included in the Declaration of EX1034 and pages 5-6 of EX1010 is worsened further by the fact that these webpages were captured on different days. More specifically, the webpages in EX1034 show a capture date August 25, 2004 (EX1034, 5), while the webpages on pages 5-6 of EX1010 show an image capture two months prior on June 9, 2004. There is no evidence that the webpages on pages 5-6 of EX1010 were still even in existence when the webpages in EX1034 were captured.

further undermines Petitioner’s position. The Reply alleges that clicking on “here” in the red box on the page below would have taken a user to pages 5-6 of EX1010:

*Want to learn more about PalmOS handhelds?*

Our software runs on the Palm operating system (PalmOS). PalmOS is developed by [PalmSource](#), and is licensed for use on handheld devices made by [palmOne](#) (including the Treo, Zire, and Tungsten lines), Handspring (now part of palmOne), Sony, Symbol (some models), Kyocera, Samsung, and others. A complete, current list of licensees, with links to their respective websites, can be found [here](#).

Take An Order! is enhanced to take advantage of barcode-scanning capability, which means that if you have a PalmOS handheld equipped with a barcode scanner, the software will operate even more efficiently (although it definitely works without barcode scanning on “normal” PalmOS handhelds). There are a variety of options for barcode scanning using PalmOS handhelds; you can read all about them [here](#).

Reply, at 18, citing EX1005, at 3. However, the corresponding pages from the Steven’s Creek Software website shown in EX1005 and 1010 are *different*. On the left (below) is the portion of TAO (EX1005) with the alleged hyperlink (red box) to pages 5-6 of EX1010, while on the right (below) is the corresponding portion of the webpage from EX1010. Significantly, the portion of the webpages entitled “Want to learn more about PalmOS devices” (blue box on left, green box on right) are *materially different*.

TAO (Ex. 1005, 3)

**More Information...**

*Want to learn more about Take An Order!?*

We’ve tried to keep this page simple, but the complete manual for **Take An Order!** is part of the download when you download the software (see below). Even if you don’t have a Palm, there are plenty of screen shots, so you can see everything the software can do, and how easy it is to use.

*Want to try Take An Order! yourself?*

You can download **Take An Order!** and put it through its paces without a Serial Number (password). There are some limitations (you can only select from the first ten items in your product catalog, and your receipts will have on them a notice that your copy of the software is unlicensed), but you’ll be able to fully evaluate what **Take An Order!** can do for you and your business. [Download now](#).

*Want to learn more about PalmOS handhelds?*

Our software runs on the Palm operating system (PalmOS). PalmOS is developed by [PalmSource](#), and is licensed for use on handheld devices made by [palmOne](#) (including the Treo, Zire, and Tungsten lines), Handspring (now part of palmOne), Sony, Symbol (some models), Kyocera, Samsung, and others. A complete, current list of licensees, with links to their respective websites, can be found [here](#).

Take An Order! is enhanced to take advantage of barcode-scanning capability, which means that if you have a PalmOS handheld equipped with a barcode scanner, the software will operate even more efficiently (although it definitely works without barcode scanning on “normal” PalmOS handhelds). There are a variety of options for barcode scanning using PalmOS handhelds; you can read all about them [here](#).

*Who we are...*

Ex. 1010, 35

**More Information...**

*Want to learn more about Take An Order!?*

We’ve tried to keep this page simple, but the complete manual for **Take An Order!** is part of the download when you download the software (see below). Even if you don’t have a Palm, there are plenty of screen shots, so you can see everything the software can do, and how easy it is to use.

*Want to try Take An Order! yourself?*

You can download **Take An Order!** and put it through its paces without a Serial Number (password). There are some limitations (you can only select from the first ten items in your product catalog, and your receipts will have on them a notice that your copy of the software is unlicensed), but you’ll be able to fully evaluate what **Take An Order!** can do for you and your business. [Download now](#).

*Want to learn more about PalmOS handhelds?*

**Take An Order!** runs on the Palm operating system, which is used on handheld devices made by Palm, Handspring, Sony, Symbol (some models), Kyocera, Samsung, and others. To learn more about the PalmOS and the wide variety of Palm Powered devices, visit the [PalmSource website](#).

*Want to learn more about barcode scanning options for the Palm?*

Many people aren’t clear on what is necessary to do barcode scanning on a Palm. [Read all about it](#).

*Who we are...*

While, in TAO (EX1005) the portion of the webpage entitled “Want to learn more about PalmOS devices” in the blue box (left) has the paragraph with the alleged hyperlink (red box), the portion of the webpage entitled “Want to learn more about PalmOS devices” in the green box (right) *entirely omits* the same paragraph *including the alleged hyperlink*. According to the Internet Archive Declarations included in the Petition, TAO (EX1005) pictured on the left was captured on August 25, 2004 (EX1034, 5), while the corresponding portion of the same webpage from EX1010 was captured August 10, 2024. EX1010, 34. Thus, sometime *after August 10, 2004*, it appears that the content on the website was modified to *first* include the paragraph with the alleged hyperlink. The fact that the website was in flux during this period further exacerbates the lack of evidence demonstrating that pages 5-6 of EX1010 which have an image capture date on June 9, 2004 (EX1010, 5) were connected to the alleged hyperlink shown in TAO (EX1005, 3) captured months later on August 25, 2004.

In summary, the Reply has submitted no evidence that clicking on the alleged hyperlink in TAO (EX1005, 3) would have brought a user to pages 5-6 of EX1010. Accordingly, all of the arguments in the Reply alleging that web pages supposedly accessible via this alleged hyperlink meet the limitations of the challenged claims must be rejected.

## **X. CONCLUSION**

For the above reasons, Patent Owner respectfully requests that the Board issue a Final Written Decision finding that the Petition failed to meet its burden with respect to any of the challenged claims.

Respectfully submitted,

Dated: September 20, 2025

By: /Daniel H. Golub/  
Daniel H. Golub  
Registration No. 33,701  
*Counsel for Patent Owner*  
*Intellectual Ventures II LLC*

## **CERTIFICATE OF COMPLIANCE WITH WORD COUNT**

Pursuant to 37 C.F.R. § 42.24(d), I certify that this Patent Owner Sur-Reply complies with the type-volume limits of 37 C.F.R. § 42.24(b)(1) because it contains 5,514 words, excluding the parts of this Patent Owner's Response that are exempted by 37 C.F.R. § 42.24(a), according to the word processing system used to prepare this Patent Owner's Response.

Respectfully submitted,

Dated: September 12, 2025

By: /Daniel H. Golub/  
Daniel H. Golub  
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*Counsel for Patent Owner*  
*Intellectual Ventures II LLC*

## **CERTIFICATE OF SERVICE**

The undersigned certifies that pursuant to 37 C.F.R. § 42.6(e), a copy of the foregoing **PATENT OWNER'S SUR-REPLY** was served via email (as consented to by counsel) on September 12, 2025 to lead and backup counsel of record for Petitioners as follows:

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Dated: September 12, 2025

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