No. _____

In The
Supreme Court of the United States

CIAS INC.,

Petitioner,

v.

ALLIANCE GAMING CORPORATION AND BALLY GAMING, INC.,

Respondents.

On Petition for Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

PETITION FOR WRIT OF CERTIORARI

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QUESTION PRESENTED

Whether the Federal Circuit's use of patent prosecution history statements in claim construction is so erroneously inconsistent among its own panel decisions and incompatible with its prior *en banc* decision in *Phillips* as to make it impossible for the public to know with any degree of confidence the scope of patent claims; and whether that Court's inconsistent judgment in this case should be reversed.

CORPORATE DISCLOSURE STATEMENT

There are no parent corporations or publicly held companies that hold 10% or more of CIAS Inc.'s stock.

TABLE OF CONTENTS

QUESTION PRESENTED i

CORPORATE DISCLOSURE STATEMENT ii

TABLE OF CONTENTS iii

TABLE OF AUTHORITIES vii

PETITION FOR A WRIT OF CERTIORARI 1

OPINIONS BELOW 1

STATEMENT OF JURISDICTION 1

STATUTORY PROVISION INVOLVED 2

STATEMENT OF THE CASE 2

A. Background 2

B. The '422 Patent Invention 8

C. Respondent's Use Of The '422 Invention . . 12

D. The Proceedings Below 14

E. The Federal Circuit Court of Appeals Decision 18

II. CIAS' STATEMENTS WITH RESPECT TO SHOSHANI WERE NOT A DISCLAIMER THAT WOULD LIMIT UNIQUE AUTHORIZED INFORMATION TO SERIAL INFORMATION ALONE OR RANDOMLY-SELECTED INFORMATION ALONE 19

III. THE LOWER COURT'S FINDINGS OF NON-INFRINGEMENT SHOULD BE REVERSED 25

IV. CONCLUSIONS 27

APPENDIX

Appendix A: Federal Circuit Opinion, Sept. 27, 2007 . . . . . 1a

Appendix B: District Court Memorandum Opinion, March 29, 2006 . . . . . 17a

Appendix C: Federal Circuit Order Denying Petition For Rehearing, October 24, 2007 . . 55a

Appendix D:District Court Judgment, March 30, 2006 . . . . . 57a

Appendix E: Request By Patentee For Reexamination, March 30, 1999 . . . . . 59a

Appendix F: Patent Owner's Statement. Aug. 24, 1999 . . . . . 69a

Appendix G: Response to Final Action Office, July 10, 1992 . . . . . 79a

Appendix H: Table of Cases 91a

SUPPLEMENTAL APPENDIX

Appendix I: U.S. Patent No. 5,283,422 . . . . . 94a

Appendix J:U.S. Patent No. 3,833,795 . . . . 139a

Appendix K: U.S. Patent No. 4,463,250 . . . 146a

Appendix L: U.S. Patent No. 6,048,269 . . . 153a

TABLE OF AUTHORITIES

CASES

Athletic Alternatives, Inc. v. *Prince Mfg., Inc.*,
73 F.3d 1573 (Fed. Cir. 1996) 4

CIAS, Inc. v. *Alliance Gaming Corp.*,
424 F. Supp. 2d 678 (S.D.N.Y. 2006) 1, 15

CIAS, Inc. v. *Alliance Gaming Corp.*,
504 F.3d 1356 (Fed. Cir. 2007) 1, 18

Elbex Video, Ltd. v. *Sensormatic Elec. Corp.*,
508 F.3d 1366,
2007 WL. 4180138 (Fed. Cir. 2007) 5, 23

Festo Corp. v. *Shoketsu Kinzoku Kogyo Kabushiki Co.*,
535 U.S. 722 (2002) 7, 8

Honeywell Int'l, Inc. v. *Universal Avionics Sys. Corp.*,
493 F.3d 1358 (Fed. Cir. 2007) 5, 23

Inverness Med. Switz. GmbH v. *Warner Lambert Co.*,
309 F.3d 1373 (Fed. Cir. 2002) 4

LG Elecs., Inc. v. *Bizcom Elecs., Inc.*,
453 F.3d 1364 (Fed. Cir. 2006) 23

Lemelson v. *Gen. Mills, Inc.*,
968 F.2d 1202 (Fed. Cir. 1992) 4

Markman v. *Westview Instruments*,
517 U.S. 370 (1996) 3

Phillips v. *AWH Corp.*,
415 F.3d 1303 (Fed. Cir. 2005) 3, 4, 5, 6, 22

Saunders Group, Inc. v. Comfortrac, Inc.,
492 F.3d, 1326 (Fed. Cir. 2007) 23

Sorensen v. *Int'l Trade Comm'n*,
427 F.3d 1375 (Fed. Cir. 2005) 5, 22, 23

Ventana Med. Sys., Inc. v. *Biogenix Labs., Inc.*,
473 F.3d 1173 (Fed. Cir. 2006) 23

Warner-Jenkinson Co. v. *Hilton Davis Chem. Co.*,
520 U.S. 17 (1997) 7

STATUTES

35 U.S.C. § 271(a) 2

28 U.S.C. § 1254(1) 1

28 U.S.C. § 1295(a)(1) 2

28 U.S.C. § 1331 2

28 U.S.C. § 2101(c) 1

PETITION FOR A WRIT OF CERTIORARI

Petitioner CIAS Inc. hereby petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Federal Circuit.

OPINIONS BELOW

The opinion of the Court of Appeals for the Federal Circuit, dated September 27, 2007 is set forth at 504 F.3d 1356 (Fed. Cir. 2007) and in the Appendix at 1a-16a. The Federal Circuit Order denying the petition for rehearing, dated October 24, 2007 is unofficially reported at 2007 WL 4125118 and is set forth in the Appendix at 55a-56a.

The opinion of the District Court, dated March 29, 2006, is reported at 424 F. Supp. 2d 678 (S.D.N.Y. 2006) and is set forth in the Appendix at 17a-54a. The Judgment of the District Court, dated March 30, 2006 is set forth in the Appendix at 57a-58a.

STATEMENT OF JURISDICTION

The judgment of the Court of Appeals for the Federal Circuit was entered on September 27, 2007. The order denying the petition for rehearing was entered on October 24, 2007. This petition is timely under 28 U.S.C. § 2101(c) and Supreme Court Rule 13.1 because it is being filed within 90 days of the denial of rehearing. This Court's jurisdiction is invoked under 28 U.S.C. § 1254(1).

STATUTORY PROVISION INVOLVED

The statutory provision involved in this case is 35 U.S.C. § 271(a):

> Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.

STATEMENT OF THE CASE

The District Court had subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a). The Court of Appeals for the Federal Circuit had exclusive appellate jurisdiction over the District Court action pursuant to 28 U.S.C. § 1295(a)(1).

A. Background

This case raises a question of patent law important to maintaining confidence in the United States Patent system. If the public is to have confidence that it can determine the scope of a patent's claims with some reasonable degree of certainty, then there must be a level of consistency and predictability in the Federal Circuit Court of Appeals' determinations of claim constructions. The inconsistency with which the Federal Circuit applies its own rules and guidelines concerning statements made by the applicant during prosecution of a patent, however, has resulted in a distinct lack of predictability. The public is in the undesirable position of not being able to assess the

scope of a patent's claims until the Federal Circuit speaks.

This should not be so. The prosecution history of a patent is an unchanging, objective record. The determination of the consequences to claim construction of the prosecution statements made by an applicant or patent owner should be a reasonably objective undertaking. The inconsistency of the Federal Circuit's use of prosecution history statements in claim construction, however, suggests that it has been otherwise.

In 1996, in *Markman v. Westview Instruments*, 517 U.S. 370 (1996), this Court held that the construction of patent claims is a legal question for the court and not the jury. Over the next nine years, the Federal Circuit struggled to develop rules and guidelines for the claim construction process. The results were inconsistent competing rules and approaches to claim construction applied by different panels of the court. Finally, in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*), the Federal Circuit provided a common set of guidelines for claim construction. The Federal Circuit reviewed the various sources of evidence to be considered in the claim construction analysis: the words of the patent claim, the patent specification describing the invention, the prosecution history of the application for the patent and extrinsic evidence such as dictionaries, reference books and expert testimony. The Court set out a hierarchy of values or weights to be accorded evidence from each of these sources in the claim construction analysis.

The Federal Circuit first underscored the importance of the claims as "the claims themselves provide substantial guidance as to the meaning of particular claim terms." *Phillips*, 415 F.3d at 1314. Next, the Federal Circuit directed the claim construction analysis to the specification, as "[t]he claims, of course, do not stand alone. Rather, they are part of 'a fully integrated written instrument' . . . . For that reason, claims 'must be read in view of the specification, of which they are a part.'" *Id.* at 1315 (citations omitted). The Federal Circuit emphasized the specification as usually being "'single best guide to the meaning of a disputed term.'" *Id.*

With respect to the prosecution history, the *Phillips* decision stated:

> Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent. *See Lemelson v. Gen. Mills, Inc.*, 968 F.2d 1202, 1206 (Fed. Cir. 1992). Furthermore, like the specification, the prosecution history was created by the patentee in attempting to explain and obtain the patent. Yet because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes. *See Inverness Med. Switz. GmbH v. Warner Lambert Co.*, 309 F.3d 1373, 1380-82 (Fed. Cir. 2002) (the ambiguity of the prosecution history made it less relevant to claim construction); *Athletic Alternatives, Inc. v. Prince Mfg., Inc.*, 73 F.3d

> 1573, 1580 (Fed. Cir. 1996) (the ambiguity of the prosecution history made it "unhelpful as an interpretive resource" for claim construction). Nonetheless, the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution . . . .

Phillips, 415 F.3d at 1317.

Consistent with the Guidelines of *Phillips*, Federal Circuit decisions have stated that, for prosecution statements to limit the meaning of a claim to a more narrow scope than would otherwise be given based on the claim words and the patent specification, the statements must amount to a clear and unmistakable disavowal of claim scope. *See Elbex Video, Ltd. v. Sensormatic Elec. Corp.*, 508 F.3d 1366, 2007 WL 4180138, at *4 (Fed. Cir. 2007); *Sorensen v. Int'l Trade Comm'n*, 427 F.3d 1375, 1380 (Fed. Cir. 2005). Consequently, if the applicant's statements are ambiguous, or subject to interpretation, then they will not result in surrender of subject matter so as to limit the patent's claims. *Elbex,* 2007 WL 4180138, at *6 (other statements in the prosecution made the purported disclaimer statement ambiguous, weighing against a finding of prosecution disclaimer); *Honeywell Int'l, Inc. v. Universal Avionics Sys. Corp.*, 493 F.3d 1358, 1365 (Fed. Cir. 2007) (purported disclaiming statement was subject to both parties' interpretations, creating ambiguity and precluding disclaimer).

CIAS agrees with these stated guidelines. However, while these decisions would appear to

provide adequate guidance, in actual application they have resulted in anything but consistent rulings. This has proved to be especially so in instances in which the applicant or patent owner was not discussing amendments to its claims to overcome a prior art rejection or explaining the structure or operation of the claimed invention, but rather describing prior art cited by the applicant or the Patent Examiner. The same sorts of prior art description statements have been held in some instances to limit the meaning of claims and in others to not limit them. The result is that the public is left at sea as to what a patent's claims mean unless and until one or another panel of the Federal Circuit decides how it is going to view these prosecution history statements.

Thus, what may initially appear as a straightforward, consistent claim construction approach is anything but that in actual application. Indeed, district courts and the Federal Circuit routinely read the same prosecution history statements and arrive at opposite conclusions. Out of 16 district court cases since *Phillips* specifically dealing with the issue of prosecution history disclaimer, the Federal Circuit has disagreed with the district court on that issue a total of 12 times. (See Table at 91a-93a.) While each disagreement did not necessarily result in ultimate reversal, this record shows that rather than provide guidance, the Federal Circuit's inconsistency has created a confused body of decisions. It is now extremely difficult for patent holders and the public to effectively gauge the meaning of claim terms in light of prosecution history statements.

In this case, for example, the District Court held that during reexamination of the patent-in-suit, CIAS, in describing a prior art patent system, had "implied" a particular operation of that system and that the "implication" of this description was a limitation to the CIAS patent's claims. Without explaining how such an "implied" description and "implication" of a limitation could satisfy its own "clear and unmistakable disavowal of claim scope" standard, the Federal Circuit affirmed the District Court's limiting claim construction and consequently judgment of non-infringement.

If all that is required to create a limiting claim construction is an "implication" based on a description of prior art, then patent applicants and the public as a whole are placed in an untenable position. Virtually everything an applicant might say about prior art could give rise to an "implication." Yet applicants routinely must describe or discuss prior art cited to or by the patent examiner. No one will know whether that discussion will limit the patent's claims unless and until there is litigation and the Federal Circuit speaks.

This Court addressed the role a patent's prosecution history may play in the context of prosecution history estoppel in *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997) and *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002). In *Festo* the Court addressed the effect of amendment to a patent claim during prosecution upon the scope of equivalents that may be accorded the claim in determining infringement. *Id.* at 734-42. The Court held that prosecution history

estoppel could arise from any "narrowing amendment made to satisfy any requirement of the Patent Act." *Id*. at 736.

The Court did not in *Festo* address the issue presented here – the effect on the literal meaning of claim terms of an applicant's or patent owner's statements made during prosecution.

B. The '422 Patent Invention

The '422 patent inventors have been recognized for their contributions to counterfeit detection.[1] One of the inventors, Leonard Storch, is the founder and president of petitioner CIAS.

The '422 patent issued February 1, 1994 as a continuation of an application originally filed April 18, 1986. (95a.) The patent was reexamined by the United States Patent and Trademark Office and a Reexamination Certificate issued on October 17, 2000. (137a.)

The inventors of the '422 patent faced the problem that prior inventors had faced – how to protect objects, such as paper currency, commercial paper, gambling chips, coins, and tokens against counterfeiting. (112a at col. 3, lines 42-46; 117a at col. 43, lines 50-55.) As the technical ability to counterfeit became more

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[1] *Counterfeit Deterrent Features for the Next-Generation Currency Design*, National Materials Advisory Board Commission on Engineering and Technical Systems, National Research Council, Publication NMAB-472, at 67, 85, National Academy Press (1993).

sophisticated, the prior inventions attempting to deal with counterfeiting became more complex. Thus, the prior art, as exemplified by Shoshani U.S. patent 3,833,795 ("Shoshani," 143a at col. 1, lines 8-21) and McNeight U.S. patent 4,463,250 ("McNeight," 152a at col. 5, lines 40-49), recognized that simply using a random number identification or a serial number identification on the object was not sufficient to deal with the counterfeiting problem.

Both Shoshani and McNeight recognized that something in addition to use of a serial number or random number was needed. Both disclosed additional steps to make it more difficult to counterfeit an object and to enable detection of counterfeit objects. Shoshani developed a paired number scheme. Shoshani assigned a random control number to an object's serial number. (143a at col. 1, lines 40-48, col. 2, lines 23-33.) The computer database stored the control number, associating it with the serial number to which it had been assigned. (143a-144a at col. 2, line 62–col. 3, line 4.) Both numbers were printed on the stock certificate, currency or the like. (*See, e.g.*, 141a at Fig. 1; 143a at col. 2, lines 23-27.) When the certificate or currency was presented for authentication, the database was checked to determine whether or not the control number was the correct control number associated with the serial number. (144a at col. 3, lines 5-24.) After checking, a new control number could be assigned to the serial number and placed on the object. (144a at col. 3, lines 46-51.)

The something else that McNeight developed was an identifying serial number generated using a secret algorithm and using that algorithm for authentication

purposes. McNeight stored the algorithm at each of the sites where, for example, a bank note might be presented for payment. McNeight did not maintain a database of issued identifying numbers and did not use such a database for authentication. McNeight checked a bank note by determining if the identifying serial number on the bank note conformed to the algorithm. If it did not, then the bank note would be considered counterfeit. (*See, e.g.,* 150a at col. 2, lines 28-32.) The prior art thus focused on complexity and how to "find-the-fake" in attempting to solve the counterfeiting problem.

The '422 patent inventors also recognized that something more needed to be done to deal with the counterfeiting problem. But they took a different path, one that has proved to be far more practical and secure than the paths taken by Shoshani, McNeight and others.

The '422 patent inventors recognized that complexity, making it more difficult to copy or counterfeit an object, was not the solution; nor was finding the fake. The '422 patent inventors understood that, regardless of the method of generating identifying information, counterfeiters will likely ultimately deduce the method or simply copy authorized identifying information from legitimate objects. They also recognized, however, that in doing so, a counterfeiter will almost invariably create objects that have the same identifying information as legitimate objects – duplicates. The '422 patent inventors recognized that the problem in the prior art systems could be dealt with by checking not only to ensure that identifying information on an object is

authorized information, but also *by checking for duplicates*.

Thus, the premise of the '422 system is based on detection of counterfeits by assigning to each object unique authorized information and storing each instance of the unique authorized information that has been assigned in a central database. Each time an object is presented for authentication, the system also stores the information read from that object in the central database. When an object is presented at one of the checking locations, the identifying information on it is transmitted to and checked at the central database. It is checked not only to determine if it is one of the stored instances of issued unique authorized information, but importantly, it is checked to determine whether it has been previously read from an object that has already been presented. (115a at col. 10, lines 52-67.) Two or more objects with the same information detects a duplicate and means that one or more of them is counterfeit. (118a at col. 15, lines 63-66). In this latter instance, while the system does not know which object, the first presented or the second, is the counterfeit, it detects the existence of a counterfeit object.

As the '422 inventors stated (118a at col. 15, lines 63-66):

> Security, moreover, resides in the fact that two or more [objects] with the same coded information means that one or more of them is counterfeit.

Such a system is especially useful in closed settings such as casinos, where there may be hundreds of thousands, if not millions, of objects and the technology for copying an authorized object, *e.g.*, photocopying a slot machine ticket or making a poker chip, may be readily available to counterfeiters. The '422 patent inventors counter-intuitively recognized that in such settings determining that a counterfeit is in use, *i.e.*, that there is a duplicate, is an effective counterfeit countermeasure, whether or not the system can determine which object is the counterfeit. Their counter-intuitive system is simple, yet elegant in its ability to provide security where more complex systems fail.

The claims of the Reexamination Certificate spell out this counterfeit detection system which detects counterfeits at two levels. In addition, Reexamination Certificate Claims 1, 3, 5-7 and 10-12, asserted against respondents specify that the unique authorized information associated with an object is comprised of a "detectable series." Claims 13 and 14 specify "unique randomly selected authorized information."

C. Respondent's Use Of The '422 Invention

Cashless slot machines, which could use a printed ticket rather than cash or tokens, promised great savings in management, maintenance and theft prevention. As a later patent noted, however, that promise was illusory so long as the problem of counterfeit tickets remained unsolved. Burns United States Patent 6,048,269, (158a at col. 2, lines 7-17).

The '422 patent invention solved that problem. And respondents, while rebuffing CIAS' attempts to license them, adopted the '422 patent invention to create the respondents' Ticket In Ticket out ("TITO"), SDS and SMS cashless slot machine systems accused of infringement. Hundreds of thousands of respondents' cashless TITO slot machines are now in use in casinos throughout the United States.

In the Alliance TITO systems, each ticket has imprinted on it a monetary value and a bar coded identifying number unique to each ticket. The player inserts the ticket into the slot machine ticket reader and can play the slot machine until the ticket monetary value is used up, or may stop at any time. Upon stopping, the slot machine prints out a new ticket with the player's current monetary balance and a new identifying number unique to the new ticket. That ticket can be read in a slot machine or redeemed for cash at a cashier's cage.

The cashier's cage and each slot machine are connected to a central computer. The central computer has associated with it a database. Just as in the '422 patent invention, each of the unique identifying numbers which has been generated is stored in the database. In addition, also just as in the '422 patent invention, each time a ticket is scanned by a slot machine or at a cashier's cage, the scanned identifying information is transmitted to the central computer and stored in the database.

As in the '422 patent invention, the identifying information is checked to determine if it is the same as information in the authorized information database.

If it is not, then a counterfeit is detected. And also just as in the '422 patent, the identifying information is checked to determine if it is the same identifying information as was scanned from a previous ticket and stored in the database. If it is the same, then a duplicate, a counterfeit, is detected.

Respondents have two basic versions of their TITO systems, referred to as the SDS system and the SMS system. The only difference of significance here is the form of identifying numbers used in each. In the SDS system, the identifying member is an eighteen digit number made up of a detectable series of fourteen digits, and error checking digits made up of three cycle redundancy check (CRC) digits and one check digit. (24a-25a.) The SMS system identifying number is made up of thirteen pseudo-random digits and five digits that identify the slot machine issuing the ticket. (25a.)[2]

D. The Proceedings Below

CIAS sued respondents for infringement of the '422 patent by their manufacture, use and sale of their TITO systems. After close of discovery, respondents moved for summary judgment of non-infringement, based on respondents' proposed claim constructions of,

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[2] There is a second SMS system as to which the only evidence produced by respondents was that it uses an eighteen digit pseudo-random number as the identifying member. Both the District Court and the Federal Circuit appear to have ignored this system in their decisions.

inter alia, the claim term "unique authorized information" and the claim term "randomly selected ..."

The District Court granted summary judgment of non-infringement in an opinion dated March 29, 2006, and entered judgment of non-infringement on March 30, 2006. *CIAS, Inc. v. Alliance Gaming Corp.*, 424 F. Supp. 2d 678 (S.D.N.Y. 2006). (17a; 57a). The District Court held that, based on statements made by CIAS concerning Shoshani during reexamination of the '422 patent, the term "unique authorized information" should be so construed to exclude "information other than serial information alone or randomly-selected information alone." (38a-39a.) The District Court then found that the identifying numbers in respondents' TITO systems did not use serial information alone (claims 1, 3, 5-7 and 10-12) or randomly-selected information alone (claims 13 and 14), and therefore do not infringe any of the asserted claims. (50a-54a.)

The District Court reached its limiting construction of "unique authorized information" by holding that the '422 patent applicants' description of Shoshani "implied" a particular manner of operation of Shoshani – which implication the District court conceded was contrary to the actual description in Shoshani of its operation. The District Court stated:

> Again, while this may be an accurate description of how Shoshani actually works, the question here is what the inventors disclaimed during re-examination. The inventors there characterized Shoshani differently, stating that it "teaches the *use of a pair of numbers,* and not

> either serial numbers alone or randomly-selected numbers alone." They did not state that Shoshani used the two numbers separately, but instead **implied** that the patent used them together, as opposed to "serial numbers alone or randomly-selected numbers alone." The inventors requested re-examination because of their failure to disclose Shoshani as prior art during the initial prosecution, and so the context of their description of Shoshani was their interest in distinguishing it from the '422 patent. With that framework in mind, **the implication of the inventors' description** is that they understood and claimed the '422 patent, in contrast to Shoshani, to use either serial numbers alone or randomly-selected numbers alone.

(35a-36a) (bold emphasis added)(footnotes omitted).

In short, the District Court limited the claim term "unique authorized information" based upon its view that the applicants had "implied" an incorrect description of Shoshani and the further "implication" that the claimed invention differed from this "implied" incorrect description.

The District Court also construed the claim term "detectable series," stating:

> Accordingly, the term "detectable series" is construed to mean "information in which a pattern, relationship, or arrangement may be detected through examination of a practical number of samples in the context in which the

> invention is used." This definition is consistent with the inventors' description in the prosecution history, including the inclusion of "sequential serial numbers" *and the exclusion of the results of "secret algorithms*."

(42a) (emphasis added).

The District Court's reference to "the exclusion of the results of 'secret algorithms'" is apparently a reference to a footnote in its opinion in which the District Court cited the '422 patent applicants' prosecution description of McNeight. (19a n.5.)

Finally, based on the disclosure of another patent by the '422 patent inventors, the district court construed the term "randomly selected" of claims 13 and 14 to refer to "true random and not pseudo-random selection." (47a.) The identifying numbers of the SMS system include pseudo-random members, not "true random" members. The District Court found that respondents' SMS TITO system does not infringe claims 13 and 14 of the '442 patent, which specify "unique randomly selected information," for this additional reason. (52a-53a).

The District Court also construed the claim term "comprised of" to be "a limiting description of composition" rather than "including but not limited to." (38a.)

The district court construed other claim terms, but they are not relevant to this Petition.

E. The Federal Circuit Court of Appeals Decision

The Federal Circuit heard argument January 12, 2007 and issued its decision September 27, 2007. *CIAS, Inc. v. Alliance Gaming Corp.*, 504 F.3d 1356 (Fed. Cir. 2007). (1a.) The Federal Circuit denied CIAS' petition for panel rehearing on October 24, 2007. (55a.)

The Federal Circuit reversed the District Court's construction of "comprised of" based on the traditional usage and meaning ascribed to "comprise" words as terms of art in patent claims, holding that "comprised of" means "including but not limited to." (7a.)

The Federal Circuit affirmed the District Court's construction of "unique authorized information" to "exclude information other than serial information alone or randomly-selected[3] information alone," and affirmed the judgment of non-infringement on that basis. The Federal Circuit stated that the "district court observed that during reexamination the inventors emphasized that the '422 invention did not

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[3] The Federal Circuit's decision concerning the meaning of "randomly-selected" is somewhat confusing. The Circuit stated that "we agree with CIAS that persons of skill in the field of computer randomization would recognize that the product thereof is most aptly understood as pseudo-random," noted that the District Court found it a "close question" and then noted that the equation was not controlling because the District Court's judgment of non-infringement is supported by its construction of "unique authorized information." (14a.)

include comparisons of pairs of numbers as in Shoshani." (12a.)

Thus, with no analysis or discussion of CIAS' reexamination statements concerning Shoshani, the Federal Circuit converted the District Court's "implied" (erroneous) description of Shoshani and the "implication" that the '422 patent inventors' claims were to serial numbers alone or randomly-selected numbers alone, into a statement that the inventors "emphasized" this supposed difference from Shoshani.

The Federal Circuit, while noting that CIAS had urged it to follow its own precedent concerning "clear and unmistakable statements of disavowal," made no attempt to explain how CIAS' statements concerning Shoshani, which even the District Court held only amounted to an implication, could meet that test.

Analysis of CIAS' reexamination statements concerning Shoshani, discussed below establish that they cannot meet it, particularly in view of the analyses made by the Federal Circuit in other cases of similar statements made during prosecution of patents.

II. CIAS' STATEMENTS WITH RESPECT TO SHOSHANI WERE NOT A DISCLAIMER THAT WOULD LIMIT UNIQUE AUTHORIZED INFORMATION TO SERIAL INFORMATION ALONE OR RANDOMLY-SELECTED INFORMATION ALONE

In its reexamination request, CIAS stated (63a-64a):

In Fig. 1, object 10 (stock certificates, checks, currency) are provided with an associated pair of numbers 11. One number of the pair 11 is a serially-selected identification number 12, and the other number of the pair is randomly-selected control number 13 (col. 2, lines 23 to 33). A master list of the associated pairs of numbers applied to objects is stored in mass memory 25 (col. 2, lines 43-45 and col. 3, lines 3-4). While recognizing the advantages that serialization can contribute to counterfeit detection, Shoshani et al. teaches away from the use of serial numbers alone, stating that: "...the use of serial numbers [alone] does not inhibit counterfeiting..." (col. 1, lines 14-35).

In Fig. 2, apparatus (now shown) feeds the object past reader 21 while reader 21 sequentially scans the objects for the pair of numbers 11 that are then stored in temporary registers 23. Comparator 24 compares pairs of numbers stored in the registers 23 with pairs of numbers stored in the mass memory 25, and discrepancies are indicated. (Col. 2, line 58 – col. 3, line 35.)

Shoshani et al. teaches the use of a pair of numbers, and not either serial numbers alone or randomly-selected numbers alone. Shoshani et al. discloses only one reader 21 in apparatus 20, with the reader and all parts of the apparatus 20 (21 to 26) being shown and described as one complete apparatus at one facility.

CIAS' statements that Shoshani "teaches away from the use of serial numbers alone, that: '...the use of serial numbers [alone] does not inhibit counterfeiting..." and "Shoshani et al. teaches the use of a pair of numbers, and not either serial numbers alone or randomly-selected numbers alone" should be understood in light of the context of the '422 claimed invention and the Shoshani disclosure. That context is that something in addition to using a serial number or a randomly-selected number must be done. In Shoshani, it is using pairs of numbers and comparing to see that one of the pair is the control number associated with the other of the pair to make counterfeiting more difficult. In the '422 patent, it is storage of information from objects previously presented, as well as storage of the unique authorized information, and checking for duplicates.

That this was the meaning and import of CIAS' statements concerning Shoshani is further confirmed by a later discussion by CIAS when equating the findings of McNeight and Shoshani in this regard. CIAS stated, "Like McNeight et al., Shoshani recognizes that "...use of serial numbers [alone] does not inhibit counterfeiting..." (col. 1, lines 14-35). (73a.)

McNeight uses authorized serial numbers. Accordingly, the authorized information of McNeight was a serial number. And CIAS equated McNeight to Shoshani in recognition that a "serial number [alone]" is not sufficient. CIAS therefore could not have, and was not, distinguishing its claimed "unique authorized information" on the grounds that it excludes information other than serial information alone or randomly-selected information alone. It was stating

what Shoshani, McNeight and the '422 patent inventors all recognized -- that something in addition to simply using a serial number or a random number is needed. That something in the '422 patent claims includes the checking of duplicates.

CIAS' statements concerning Shoshani do not amount to "a clear and unambiguous disavowal of the broad scope of the claim language." *Sorensen*, 427 F.3d at 1380. They are subject to the interpretation petitioner CIAS gave them in the District Court and the Federal Circuit. Indeed, CIAS' interpretation is consistent with the claim language, with the '422 patent specification, and with the statements in the prosecution history discussing both Shoshoni and McNeight, referred to above. It is the District Court's and Federal Circuit's interpretation of those statements which is unsustainable.

If the Federal Circuit had followed its own precedents and used the claims and specification as a guide for claim construction as expected under *Phillips* before turning to CIAS' statements in the reexamination regarding Shoshani, the inappropriateness of placing a limitation on "unique authorized information" would have been apparent. As discussed above, in *Phillips* the Federal Circuit stated that the prosecution history often "lacks the clarity of the specification" and thus is less reliable during claim construction compared to the claims and the specification. *Phillips*, 415 F.3d at 1317.

First, the language of claims 1, 3, 5-7 and 10-12 states that the identifying information is "comprised of" a "detectable series." As the Federal Circuit held in

this case, the term "comprised of" means "including but not limited to." The claim language itself therefore belies any interpretation of CIAS's statements to mean that these claims are limited to serial information alone. *See Sorensen*, 427 F.3d 1379-80; *LG Elecs., Inc. v. Bizcom Elecs., Inc.*, 453 F.3d 1364, 1373-74 (Fed. Cir. 2006); *Ventana Med. Sys., Inc. v. Biogenix Labs., Inc.*, 473 F.3d 1173, 1180 (Fed. Cir. 2006).

Second, the '422 patent discloses identifying numbers made up of parts, including numbers like respondent's SDS systems identifying number, made up of a detectable series of digits and error check digits. (122a-123a at col. 24, line 25-col. 26, line 40; 133a at col. 46, lines 40-46; 134a at col. 47, lines 1-4.) CIAS' statements about Shoshani could hardly have been disclaiming this very type of identifying number, specifically disclosed in the patent specification. *See Ventana Med. Sys., Inc.*, 473 F.3d at 1180.

Furthermore, the Federal Circuit's analysis of CIAS' statements concerning Shoshani during reexamination was limited and superficial. In contrast, in *Saunders Group, Inc. v. Comfortrac, Inc.,* the Federal Circuit undertook a rigorous analysis of the actual statements made in determining that the language of the statements did not support the interpretation offered by the defendants. 492 F.3d, 1326, 1334-35 (Fed. Cir. 2007). Similarly, in *Honeywell Int'l Inc.*, the Federal Circuit determined whether or not the alleged disclaiming statement was subject to both interpretations offered by the parties and concluded that since the statement was open to both, it could not constitute a disclaimer. 493 F.3d at 1365-66. In *Elbex Video Ltd.*, the Federal Circuit

looked to other statements in the prosecution history and determined whether or not they were consistent with the interpretation of the alleged disclaiming statement. 2007 WL 4180138, at *5. The presence of other statements conflicting with the alleged disclaimer made it too ambiguous for purposes of limiting the claims. *Id*. at *6.

Finally, to reach the District Court's and Federal Circuit's interpretation of CIAS' statements about Shoshani, one has to read those statements so that they incorrectly describe Shoshani. It strains logic to the breaking point to assume that CIAS, which was knowledgeable about anti-counterfeiting systems, would incorrectly describe Shoshani and then distinguish its claims from that incorrect description. It is no wonder the District Court could only say that it found such an incorrect description "implied" and the supposed distinction an "implication." (35a-36a.)

In short, CIAS' Shoshani statements should not have resulted in limiting the '422 patent claims to "serial information alone or randomly-selected information alone." The public, including CIAS, should have been able to rely on the claim words, the patent's specification, and a consideration of the prosecution history under the Federal Circuit's own precedential guidelines. And the result should have been that the claims are not limited by the prosecution statements about Shoshani.

III. THE LOWER COURT'S FINDINGS OF NON-INFRINGEMENT SHOULD BE REVERSED

The '422 patent claims call for unique identifying information "comprised of ... a detectable series" or "randomly-selected information."

The Federal Circuit correctly held that "comprised of" means "including but not limited to," but then held that the prosecution history required that "unique identifying information" must be "serial alone or randomly-selected alone."

When the prosecution history is correctly understood, there is no such limitation. Accordingly, respondents' SDS system, which uses an identifying member that includes a thirteen digit detectable series, infringes because it uses unique identifying information "comprised of . . . a detectable series."

The District Court's and Federal Circuit's ancillary determination that "detectable series" does not include the result of a "secret algorithm" does not change this fact, even were the final four error correction digits of the SDS identifying numbers considered a secret algorithm. The SDS identifying number which includes a 13 digit detectable series would still be "comprised of a detectable series."[4]

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[4] That determination, based upon the '422 inventor's description of McNeight, is an error in any event. What the inventors were distinguishing about McNeight was its use of a secret algorithm for testing an object's information for authenticity at the remote

Likewise, respondents' SMS system, which uses an identifying number that includes a thirteen digit pseudo-random number, infringes because it uses "unique randomly-selected authorized information." That the identifying number may also include a five

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location, as opposed in '422 patent's storing of the authorized identifying information and comparing the stored information to the object's information at a central location (89a) (emphasis added):

> The same applies to McNeight et al., which also teaches that processing between machine-read information and information generated by an algorithm be done at the remote locations rather than at a central location. See Figs. 2 and 3 and the associated text. Moreover, the claims herein also may be distinguished from McNeight et al. because McNeight et all [sic] does not teach storing the authorized serial numbers at all. Rather, McNeight et al. teaches use of an algorithm to generate the authorized serial numbers. This is risky from a security standpoint even if the algorithm were stored only at a central location because once the algorithm was either deduced or stolen, then a counterfeiter could generate all of the authorized serial numbers and counterfeit with increased impunity. Providing the algorithm to a number of portable code readers 21 only makes the security problem worse.

Similarly, CIAS noted (86a) (emphasis added):

> As to McNeight et al., that patent does not disclose storing the authorized serial numbers. Instead, McNeight et al. teaches storing a secret algorithm which generates the code markings for the articles such that one cannot deduce the algorithm from a small sample of the markings.

digit number identifying the slot machine issuing the ticket does not change that fact.

IV. CONCLUSIONS

The Federal Circuit's application of its own guidelines for consideration of prosecution history statements in claim construction has been so inconsistent as to create unacceptable uncertainty in the public. CIAS agrees with the stated guidelines requiring clear and unmistakable disavowal of claim scope. What CIAS requests of this Court is that it confirm those guidelines and, by reversing the judgment of non-infringement in this case, ensure that in the future the Federal Circuit consistently applies those guidelines.

Respectfully submitted,

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