IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

TQP DEVELOPMENT, LLC,	§	
	§	
v.	§	CIVIL ACTION NO. 2:09-cv-00279
	§	
TICKETMASTER	§	
ENTERTAINMENT, INC., et al.,	§	

MEMORANDUM OPINION AND ORDER

I.   INTRODUCTION

This is the third of four patent infringement actions pending before the Court where

Plaintiff TQP Development, LLC ("TQP") alleges that a number of defendants have infringed

U.S. Patent No. 5,412,730 ("the '730 Patent").   The complaint in this case was filed on

September 16, 2009, since then a number of defendants have been dismissed from the case.   The

remaining defendants in this case are Live Nation, Inc., United Parcel Service, Inc. and DHL

Express (USA), Inc. (collectively "Defendants")

On October 18, 2010, the Court held a claim construction hearing in the related case of

TQP Development, LLC. v. Merrill Lynch & Co., *Inc. et al.*, 2:08-CV-471 ("*Merrill Lynch*").   On

January 5, 2011, the Court held a claim construction hearing construction hearing in the related

case of *TQP Development, LLC v. Barclays PLC et al*., 2:09-CV-088 ("*Barclays*").   The Court

issued claim constructions orders construing a number of disputed terms in both of these cases.

(*Merrill Lynch,* Dkt.No. 383 (March 28, 2011); *Barclays,* Dkt. No. 165 (March 28, 2011.).)

There are disputed terms for construction.   Three of these terms have been previously construed

by the Court in their entirety; three terms of the term have been previously construed as part of a

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larger term; and two new terms that were not previously disputed. On August 18, 2011, the Court held a claim construction hearing where the parties presented oral arguments regarding the disputed terms. This order will first briefly address the technology at issue in the case and then turn to the merits of the claim construction issues.

II. BACKGROUND OF THE TECHNOLOGY

The '730 Patent relates to a method of transmitting data in encrypted form. '730 patent, 1:12-14. The '730 patent teaches a method for encoding data at a first station, transmitting the encoded or encrypted data to a second station, and decoding the data at the second station. The data is encoded and decoded using encryption keys. The encryption keys are simply the mechanism used to encrypt or encode the data to an unintelligible form for transmission and then to decrypt or decode the data to an intelligible form at the receiving end.

The '730 patent generally discloses a transmitter and a receiver connected via a data link for sending and receiving the data. A principle feature of the invention is to use pseudo-random number generators at both the transmitting and receiving stations to supply a like sequence of encryption keys to both the encryptor and decryptor, without these keys being transmitted in any form over the transmission facility. '730 patent, 1:38-42. This avoids the problems that arise when the encryption keys are transmitted between the transmitting and receiving stations. For example, this eliminates the possibility of a computer hacker intercepting the encryption keys during transmission between the stations. '730 patent, 1:25-36.

To avoid transmitting the encryption keys, the claimed method generates a first sequence of key values based on a seed value at the transmitter, and a second sequence of key values based on the same seed value at the receiver. The key values at both the receiver and transmitter are

produced "at a time dependent upon a predetermined characteristic of the data being transmitted," so that the keys at both the transmitting and receiving stations stay synchronized. In other words, the method monitors the flow of transmitted data and then advances the random number generator each time the transmitted data satisfies a predetermined condition. '730 patent, 1:48-53. By generating the keys at both transmitting and receiving ends, the keys themselves do not have to be transmitted, which increases the security of the encrypted transmission.

The **abstract of the '730 patent** states:

> A modem suitable for transmitting encrypted data over voice-grade telephone line. The modem is implemented by the combination of integrated circuit components including a microprocessor, a serial communications controller which communicates with connected data terminal equipment, and a modulator/demodulator for translating between voice band tone signals and digital data. Pseudo random number generators are employed at both the transmitting and receiving stations to supply identical sequences of encryption keys to a transmitting encoder and a receiving decoder. An initial random number seed value is made available to both stations. The random number generators are advanced at times determined by predetermined characteristics of the data being transmitted so that, after transmission has taken place, the common encryption key can be known only to the transmitting and receiving stations.

The '730 patent is a continuation-in-part of application 07/418,178 and includes only one independent claim and one dependent claim. Claim 1 is the sole claim asserted in this case.

Claim 1 of the '730 patent is reproduced below:

> 1. A method for transmitting data comprising a sequence of blocks in encrypted form over a communication link from a transmitter to a receiver comprising, in combination, the steps of:
> providing a seed value to both said transmitter and receiver,
> generating a first sequence of pseudo-random key values based on said seed value at said transmitter, each new key value in

said sequence being produced at a time dependent upon a predetermined characteristic of the data being transmitted over said link,

encrypting the data sent over said link at said transmitter in accordance with said first sequence,

generating a second sequence of pseudo-random key values based on said seed value at said receiver, each new key value in said sequence being produced at a time dependent upon said predetermined characteristic of said data transmitted over said link such that said first and second sequences are identical to one another, a new one of said key values in said first and said second sequences being produced each time a predetermined number of said blocks are transmitted over said link, and

decrypting the data sent over said link at said receiver in accordance with said second sequence.

III.   GENERAL PRINCIPLES GOVERNING CLAIM CONSTRUCTION

"A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

To ascertain the meaning of claims, the Court looks to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent's claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

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Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee's invention. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

This Court's claim construction decision must be informed by the Federal Circuit's decision in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the *claims* of a patent define the invention to which the patentee is entitled the right to exclude." 415 F.3d at 1312 (emphasis added) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id*. The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id*. at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention and that patents are addressed to and intended to be read by others skilled in the particular art. *Id*.

The primacy of claim terms notwithstanding, *Phillips* made clear that "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id*. Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of "a fully integrated written instrument." *Id*. at 1315, *quoting Markman*, 52 F.3d at 978. Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id*. at 1314-17. As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims." *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

> Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Phillips, 415 F.3d at 1316. Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. Like the specification, the prosecution history helps to demonstrate how the inventor and the PTO understood the patent. *Id.* at 1317. Because the file history, however, "represents an ongoing negotiation between the PTO and the applicant," it may lack the clarity of the

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specification and thus be less useful in claim construction proceedings. *Id*. Nevertheless, the prosecution history is intrinsic evidence that is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Phillips*, 415 F.3d at 1319-24. The approach suggested by *Texas Digital*—the assignment of a limited role to the specification—was rejected as inconsistent with decisions holding the specification to be the best guide to the meaning of a disputed term. *Id*. at 1320-21. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of "focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent." *Id*. at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.* What is described in the claims flows from the statutory requirement imposed on the patentee to describe and particularly claim what he or she has invented. *Id*. The definitions found in dictionaries, however, often flow from the editors' objective of assembling all of the possible definitions for a word. *Id*. at 1321-22.

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the

court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323-25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant. Having read the parties' papers and carefully considered their arguments and the relevant legal authority, the Court hereby rules as follows.

IV. DISPUTED TERMS OF THE '730 PATENT PREVIOUISLY CONSTRUED BY THE COURT

Defendants presented arguments for all of the disputed terms that were previously construed by the Court. These arguments are discussed in more detail below.

V. AGREED CONSTRUCTIONS

Based upon the joint submission of claim construction charts and subsequent arguments in briefing and at the hearing, the parties have not agreed on any proposed constructions.

VI. TERMS IN DISPUTE OF THE '730 PATENT

At a high level, the parties dispute whether the constructions should include two limitations proposed by Defendants in a number of the terms. The first limitation Defendants include in their proposed constructions is the "in advance of any transmission" limitation. The second limitation Defendants include in their proposed constructions is the "exclusively" limitation. Defendants contend that support for including both of these limitations can be found in the Background of the Invention section of the specification. Specifically, the specification states:

In accordance with a principle feature of the present invention,

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pseudo-random number generators are employed at both the transmitting and receiving stations to supply a like sequence of encryption keys to both the encryptor and decryptor, without these keys being transmitted in any form over the transmission facility. In accordance with the invention, to permit the two stations to communicate, each supplied *in advance* with a random number seed value which *exclusively* determines the numerical content of the sequence of numeric values generated by each of the two pseudo-random generators.

'730 patent, 1:37-48. Regarding the "in advance of any transmission," the Court finds that the specification is ambiguous and does not require that the seed value or the interval value be provided "in advance of any transmission," but instead requires that these values are provided in advance of "any communications," not transmissions. Plaintiff correctly argues that the claims do require that the "seed value" be provided to the transmitter and receiver before encrypted data is sent. Although, the transmitter would be required to have the seed value to generate the encryption keys prior to transmission, there is no explicit requirement in the patent or file history that suggests that the receiver must also be provided the seed value prior to transmission. The invention of the '730 patent would likewise function if the seed value was provided to the receiver any time prior to decrypting the encrypted data sent over the link.

Regarding the "exclusivity" limitation, Defendants argue that the specification expressly states that the seed value "exclusively determines the numerical content of the sequence of numeric values generated by the pseudorandom number generators." '730 patent,1:45-48. This "sequence of numeric values generated by the pseudo-random number generators" is the "like sequence of encryption keys" that is provided to both the encryptor and decryptor. '730 patent, 1:37-48. That is, Defendants contend that the patentee's written description of the invention identifies the seed value as the exclusive determinant of the numerical content generated by the

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pseudo-random number generators.

Plaintiff responds that the specification is only describing one exemplary method of arriving at the key sequence "by the combination of (1) the internal makeup of the generator 23 and by (2) a supplied random number seed value which initializes the generator 23." '730 patent, 3:30-33. Plaintiff argues that there is no requirement that the key values are "based exclusively on [the] seed value." In other words, Plaintiff argues that this exemplary embodiment does not limit the claim language nor does it even suggest that the "key values" are based exclusively on the seed value.

The Court finds that Defendants have the better argument and that the claim language indicates that encryption and decryption is possible because the seed value is provided to both the transmitter and receiver, which is then used to generate the pseudo-random key values. Moreover, the specification describes the "exclusively" limitation in terms of "the invention" and not just an exemplary embodiment of the invention. Given this, the Court will now turn to the disputed terms and phrases.

1. "Providing a Seed Value to Both Said Transmitter and Receiver"

Claim Phrase	Court's Previous Construction	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"providing a seed value to both said transmitter and receiver"	In *Merrill Lynch*, the Court construed: "providing a seed value to both said transmitter and receiver" as "providing the same seed value to both the transmitter and receiver"	"providing the same seed value to both the transmitter and receiver"	"providing the same seed value to both the transmitter and receiver in advance of any transmission over said communication link which exclusively determines the numerical content of the sequence of numeric values generated by each of the two pseudo-random generators (i.e. the seed value is not generated by either the transmitter or the receiver and the seed value is not provided by either the transmitter or the receiver to the other)"

The Court construes "providing a seed value to both said transmitter and receiver" as "providing the same seed value to both the transmitter and receiver."

A. Parties' Construction Arguments

The parties dispute: (1) whether the seed value has to be provided in advance of any transmission; (2) whether the seed value exclusively determines the numerical content of the sequence of numeric values generated by each of the two pseudo-random generators; and (3) whether the seed value has to be provided from outside the transmitter and receiver. TQP notes that this phrase was construed by the Court in *Merrill Lynch*, and recommends the construction previously adopted by the Court. Additionally, TQP contends that Defendants' inclusion of the language that "the seed value is not generated by either the transmitter or the receiver and the

seed value is not provided by either the transmitter or the receiver to the other" improperly reads in limitations from the exemplary embodiment illustrated in Figure 1.

Defendants first contend that the specification explicitly states that the seed value must be provided to transmitter and receiver in advance of any transmission. As discussed above, the Court disagrees and finds that the specification does not require that the seed value or the interval value be provided "in advance of any transmission," but instead requires that these values are provided in advance of "any communications," not transmissions. Plaintiff correctly argues that the claims do no requirement that the "seed value" be provided to the transmitter and receiver before encrypted data is sent. Although, the transmitter would be required to have the seed value to generate the encryption keys prior to transmission, there is no explicit requirement in the patent or file history that suggests that the receiver must also be provided the seed value prior to transmission.

Defendants next contend that the specification also explicitly states that the seed value "exclusively determines the numerical content of the sequence of numeric values generated by the pseudorandom number generators." *Id.* at col. 1, ll. 45-48. As discussed above the Court agrees that the specification does state the exclusively limitation, but the Court disagrees that this limitation should be added to the construction of this disputed term. Instead the Court finds that this limitation should be included in the disputed term "based on said seed value" as discussed in more detail below. Finally, Defendants contend that because the claims require the same seed value to be "provided" to both the transmitter and receiver, the seed value must not generated by either the transmitter or the receiver and the seed value is not provided by either the transmitter or the receiver to the other. Thus, Defendants argue that the seed value is not generated by either

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the transmitter or the receiver.

B.   Findings

To begin its analysis, the Court first turns to the claims language. The phrase "providing a seed value to both said transmitter and receiver" appears only once in the claim language. The Court notes that there is nothing particularly confusing about the phrase as it is used in the claims. Additionally, a further review of the specification and prosecution history leads to the conclusion that Defendants' proposed construction is an attempt to read limitations of an exemplary embodiment into the claims.

First, Defendants are correct that Figure 1 illustrates that that the "random number seed" is outside of the transmitting station 11 and receiving station 12. In describing Figure 1, the specification teaches that the seed number is supplied to the generator 23 in this embodiment. '730 patent, 3:29-33. From this, Defendants conclude that the seed value has to be provided from outside the transmitter and receiver. The problem with Defendants' analysis is that it fails to consider Figure 4, which is more applicable because it illustrates the "encrypting the data" element of claim 1. In describing Figure 4, the specification states that "[t]he random number generators 23 and 38 at the transmitting station obtain their seed values from a key memory 50." '730 patent, 9:51-53. As illustrated in Figure 4, key memory 50 is included within transmitting station 11 and is not external to it. "Similarly, at the receiving station, the seed values for the remote terminals from which the receiving station is authorized to receive information are stored in a key memory 60 connected to supply seed values to the generators 27 and 40." '730 patent, 9:55-60. Again, Figure 4 illustrates that key memory 60 is included within receiving station 12 and is not external to it. Thus, Figure 4 provides an embodiment that would be excluded by

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Defendants' proposed construction.

The prosecution history also does not support Defendants' proposed construction. Defendants cite to the Examiner's statement in the prosecution history that "'providing' does not indicate that the 'seed value' is generated" in support of their argument. (Dkt. No. 221-3 at 120-21 (Office Action dated July 8, 1993, pp. 2-3.).) However, the Examiner's statement relied on by Defendants is ambiguous because the Examiner failed to provide any analysis. (Dkt. No. 221-3 at 120.) (Examiner stated that "'providing' does not indicate that the 'seed value' is generated."). The Examiner did however provide some analysis for the rejection of claim 12, but this analysis fails for the same reason mentioned above. The applicant included claim 12, which was dependent from claim 8 and included the further limitation that the same seed value was transmitted to the transmitter and receiver from a control center remote from the transmitter and receiver. Thus, claim 8 and claim 12 were intended to have different scope, with claim 12 further requiring that the seed value be transmitted to the transmitter and receiver from a remote control center. In rejecting claim 12, the Examiner stated that "the provision of the 'seed value' via mail (as written in Figure 1) is inherently the provision of the seed value from a center separate from the transmitter and the receiver in the transmitter is not a mailing facility." (Dkt. No. 221-3 at 121.) In making this statement, the Examiner is specifically referring to Figure 1 and does not appear to have considered Figure 4. Thus, given the dependent nature of claim 12 and the explicit reference to Figure 1, this portion of the prosecution history fails to provide any helpful insight as it relates to this phrase. Instead, it only establishes the Examiner's interpretation of the embodiment illustrated in Figure 1 and does not appear to consider the embodiment illustrated in Figure 4. Thus, the Court declines to adopt Defendants' proposed

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construction and construes the phrase "providing a seed value to both said transmitter and receiver" as "providing the same seed value to both the transmitter and receiver."

2. "encrypting the data" and "decrypting the data"

Claim Phrase	Court's Previous Construction	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"encrypting the data" / "decrypting the data"	In *Barclays*, the Court construed "encrypting the data" as "converting clear text data into cipher text", and "decrypting the data" as "converting cipher text data into clear text"	"converting clear text data into cipher text"/ "converting cipher text data into clear text"	"encrypting a sequence of blocks"/ "decrypting a sequence of blocks"

The Court construes "encrypting the data" as "converting clear text data into cipher text." The Court construes "decrypting the data" as "converting cipher text into clear text." The terms "encrypting the data" and "decrypting the data" have already been construed by this Court in *Barclays*. The Court has already provided sound reasoning for its construction, and there is no need to re-construe these terms. Defendants' proposed constructions provide nothing to clarify the terms. In fact, Defendants' construction merely repeats the claim language "encrypting" and "decrypting" without providing any definition for the terms. This provides no help to the trier of fact. In actuality, Defendants' constructions are attempts to construe the term "data" as "a sequence of blocks." However, the plain language of claim 1 already states "[a] method for transmitting data comprising a sequence of blocks…" Accordingly, the Court construes "encrypting the data" as "converting clear text data into cipher text," and "decrypting the data"

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as "converting cipher text into clear text."

> 3. **"A time dependent upon a predetermined characteristic of the data being transmitted over said link"**
> 4. **"A predetermined characteristic of the data being transmitted over said link / said predetermined characteristic of said data transmitted over said link"**

Claim Phrase	Court's Previous Construction	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"A time dependent upon a predetermined characteristic of the data being transmitted over said link" "A predetermined characteristic of the data being transmitted over said link / said predetermined characteristic of said data transmitted over said link"	In *Merrill Lynch*, the Court construed: "each new key value in said [first] sequence being produced at a time dependent upon a predetermined characteristic of the data being transmitted over said link" as "a new key value in the first sequence is produced each time a condition based on a predetermined characteristic of the transmitted data is met at the transmitter." and "each new key value in said [second] sequence being produced at a time dependent upon a predetermined characteristic of the said being transmitted over said link" as " a new key value in the second sequence is produced each time a condition based on a predetermined characteristic of the transmitted data is met at the receiver."	No construction necessary	"when the block count reaches the interval number" "an interval number supplied (Fig. 1) or generated (Fig. 4) in advance of any transmission over said communication link"

The Court construes "each new key value in said [first] sequence being produced at a

time dependent upon a predetermined characteristic of the data being transmitted over said link" as "a new key value in the first sequence is produced each time a condition based on a predetermined characteristic of the transmitted data is met at the transmitter." The Court construes "each new key value in said [second] sequence being produced at a time dependent upon said predetermined characteristic of said data transmitted over said link" as "a new key value in the second sequence is produced each time a condition based on a predetermined characteristic of the transmitted data is met at the receiver."

A.   Parties' Construction Arguments

The parties dispute whether the phrase "predetermined characteristic" should be limited to "when the block count reaches the interval number." Plaintiff argues that there is nothing in the prosecution history or specification that limits the above claim terms to the construction of "when the block count reaches the interval number" as proposed by Defendants. Plaintiff also argues that Defendants' reliance on the reexamination is also incorrect. Specifically, Plaintiff argues that during the reexamination, the patentee stated that "*[o]ne example* of such a satisfied condition [of a predetermined condition] is provided at 3:19-25, which is satisfied when the block counter counts a certain number of blocks…" (Dkt. No. 221-10 at 7.) (emphasis added).

B.   Findings

To begin its analysis, the Court turns to the claims themselves. Each of the disputed phrase appears only once in the claim language. The Court is of the opinion that there is nothing particularly confusing about how either phrase is used in the claims except for potential antecedent issues related to "said sequence." In that vein, the Court concludes that the phrase "each new key value in said [first] sequence being produced at a time dependent upon a

predetermined characteristic of the data being transmitted over said link" relates to the first sequence and the transmitter; and that the phrase "each new key value in said [second] sequence being produced at a time dependent upon said predetermined characteristic of said data transmitted over said link" relates the second sequence and the receiver. Moreover, the claim language itself states at what points in time the sequences are generated. Thus, the Court concludes that adding the additional language of "when the block count reaches the interval number" would be reading a limitation of an embodiment into the claims. Under the reexamination section titled "Claim 1 – 'Time Dependent Upon a Predetermined Characteristic,'" the patentee simply stated that one example of satisfying a condition is when the block counter reaches the interval number. (Dkt. No. 221-10 at 7.) Given this, the Court construes the phrase "each new key value in said sequence being produced at a time dependent upon a predetermined characteristic of the data being transmitted over said link" as "a new key value in the first sequence is produced each time a condition based on a predetermined characteristic of the transmitted data is met at the transmitter." And the phrase "each new key value in said sequence being produced at a time dependent upon said predetermined characteristic of said data transmitted over said link" as "a new key value in the second sequence is produced each time a condition based on a predetermined characteristic of the transmitted data is met at the receiver."

5. "predetermined number of said blocks"

Claim Phrase	Court's Previous Construction	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"predetermined number of said blocks"	No construction necessary. In addition, in *Barclays* the Court construed "a predetermined number of blocks" as part of the phrase "a new one of said key values in said first and said second sequences being produced each time a predetermined number of said blocks are transmitted over said link"	No construction necessary	"the interval number determined in advance of any transmission over said communication link"

After reviewing the disputed phrase in the context of the entire claim, the Court is of the opinion that there is nothing confusing about this phrase. The Court therefore finds that no construction is necessary.

A. Parties' Construction Arguments

The parties dispute whether the construction must specify that (1) the interval number is the number of blocks and (2) that the interval number must be determined in advance of any transmission. As discussed above, there is no requirement that an interval number must be determined in advance of any transmission on the communication link. Defendants' attempt to impose a temporal limitation is improper. Additionally, Defendants' construction further attempts to define the entire term "predetermined number of said blocks" as "the interval number determined in advance of any transmission over said communication link" without any regard to the word "blocks" in the claim term.

B. Findings

To begin its analysis, the Court turns to the claims themselves. The disputed phrase "a

predetermined number of said blocks" appears only once in the claim language. After reviewing the disputed phrase in the context of the entre claim, the Court is of the opinion that there is nothing confusing about this phrase. The claim language states that a new key value is produced in the first and second sequence each time a predetermined number of the blocks are transmitted over the link. This is straight forward and Defendants' construction is an attempt to read a temporal limitation into the claim. In addition, the claims do not recite "interval number." Instead, the specification states that the "the block counter 21 may simply count the number of bytes (characters), words or blocks of data being transmitted, compare the current count with a predetermined 37 interval number" '730 patent, 3:19-25. Thus, to replace the recited "predetermined number of said blocks" with Defendants' proposed "interval number" would be to define the entire phrase without any regard to the word "blocks" in the claim term. This would be improper because claim 1 recites that "a new one of said key values in said first and said second sequences being produced each time a *predetermined number of said blocks* are transmitted over said link." That is, the key values are not produced at an interval number based on bytes, characters, or words, but instead on a number of blocks. Accordingly, the Court declines to adopt Defendants' proposed construction and finds that that there is nothing confusing about this phrase that requires construction.

VII. NEW DISPUTED CLAIM TERMS OF THE '730 PATENT

1. "Based on said seed value"

Claim Term/Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"Based on said seed value"	No construction necessary.	"based exclusively on said seed value"

The Court construes "based on said seed value" as "based exclusively on said seed value."

A. Parties' Construction Arguments

Defendants argue that the specification expressly states that the seed value "exclusively determines the numerical content of the sequence of numeric values generated by the pseudorandom number generators." '730 patent, 1:45-48. This "sequence of numeric values generated by the pseudo-random number generators" is the "like sequence of encryption keys" that is provided to both the encryptor and decryptor. '730 patent, 1:37-48. That is, Defendants contend that the patentee's written description of the invention identifies the seed value as the exclusive determinant of the numerical content generated by the pseudo-random number generators.

Plaintiff responds that the specification is only describing one exemplary method of arriving at the key sequence "by the combination of (1) the internal makeup of the generator 23and by (2) a supplied random number seed value which initializes the generator 23." '730 patent, 3:30-33. Plaintiff argues that there is no requirement that the key values are "based exclusively on [the] seed value." In other words, Plaintiff argues that this exemplary embodiment does not limit the claim language nor does it even suggest that the "key values" are

based exclusively on the seed value.

Defendants have the better argument and the claim language indicates that encryption and decryption is possible because the seed value is provided to both the transmitter and receiver, which is then used to generate the pseudo-random key values. Moreover, the specification describes the "exclusively" limitation in terms of "the invention" and not just an exemplary embodiment of the invention.

B.   Findings

To begin its analysis, the Court first turns to the claims language. The phrase "based on said seed value" appears in claim 1. The Court notes that there is nothing particularly confusing about the phrase as it is used in the claims. Additionally, a further review of the specification and prosecution history leads to the conclusion that Defendants' proposed construction is the correct one. That is, Defendants are correct that the specification of the '730 patent explicitly states that "[i]n accordance with the invention … a random number seed value … exclusively determines the numerical content of the sequence of numeric values generated by each of the two pseudo-random generators." '730 patent, 1:43-47. The Court notes that this is a description of the present invention and not just an embodiment of the invention. There is no disclosure in the specification that would allow for the use of a part of a seed value to be used to generate a seed value that would then in turn be used in a pseudo-random number generator. For these reasons, the Court adopts Defendants' proposed construction and construes the phrase "based on said seed value" as "based exclusively on said seed value."

2. "Predetermined"

Claim Term/Claim Language	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"Predetermined"	No construction necessary.	"determined before any transmission over said communication link"

After reviewing the disputed term in the context of the entre claim, the Court is of the opinion that there is nothing confusing about this term. The Court therefore finds that no construction is necessary.

A.   Parties' Construction Arguments

Defendants' proposed construction attempts to import a temporal limitation into the claim language. As discussed above, there is no requirement that the "predetermined" characteristic or "predetermined" number of blocks must be determined before any transmission of any kind can occur over said link. The Court therefore rejects Defendants' proposed construction.
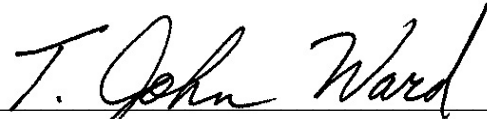
B.   Findings

To begin its analysis, the Court turns to the claims themselves. The disputed term "predetermined" appears four times in the claim language. The Court notes that the term is used consistently in the claims and is meant to have a similar meaning. After reviewing the disputed term in the context of the entre claim, the Court is of the opinion that there is nothing confusing about this phrase. As discussed above, neither the claim language nor specification requires that the claimed "predetermined" characteristic or claimed "predetermined" number of blocks be "determined before any transmission," instead it only requires that these be determined in advance of "any communications," not transmissions. This is straight forward and Defendants' construction is an attempt to read a temporal limitation into the claim. Accordingly, the Court

finds that no construction is necessary.

VIII. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the '730 patents. The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

SIGNED this 23rd day of September, 2011.

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T. JOHN WARD
UNITED STATES DISTRICT JUDGE