

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION

JOAO BOCK TRANSACTION SYSTEMS,  
LLC,

Plaintiff,

v.

FIRST NATIONAL BANK, *et al.*,

Defendants.

Case No. 11 C 6472

Hon. Harry D. Leinenweber

**MEMORANDUM OPINION AND ORDER**

Before the Court are the parties' proposed constructions of terms contained in Plaintiff Joao Bock Transactions Systems, LLC's patent. The Court construes the terms as detailed below.

**I. BACKGROUND**

In this case for monetary and injunctive relief, Plaintiff Joao Bock Transactions Systems, LLC contends that Defendants Barrington Bank & Trust Company N.A., American Chartered Bank, Bridgeview Bank Group, Citizens First National Bank, Northbrook Bank and Trust Company f/k/a First Chicago Bank & Trust Company, Hinsdale Bank & Trust Company, Lake Forest Bank and Trust Company, Libertyville Bank & Trust Company, and North Shore Community Bank & Trust Company's (hereinafter, collectively, the "Defendants") are infringing upon Plaintiff's United States Patent No. 6,047,270 (the "'270 Patent").

### **A. The Parties**

Raymond Joao, ("Joao") is a licensed patent attorney. He holds more than nineteen patents and has more than thirty pending applications. In April 2000, Joao and another inventor, Robert Bock ("Bock"), obtained the '270 Patent entitled, "Apparatus and Method for Providing Account Security." Joao and Bock assigned the '270 Patent to an entity called Joao Bock Transaction Systems, LLC (hereinafter, "Joao Bock" or "Plaintiff"), a limited liability company in New York. Joao Bock is the legal owner of the '270 Patent and thus has the right (1) to exclude others from making, using, selling, offering to sell or importing the patented invention in the '270 Patent; (2) to sublicense the '270 Patent; and (3) to sue for infringement and recover past damages. Joao Bock filed the instant suit in this Court on September 15, 2011.

Defendants are all banks or financial institutions in Illinois. Joao Bock's Complaint alleges that Defendants have infringed upon a number of claims in the '270 Patent through Defendants' internet banking services. In Plaintiff's Complaint, it originally named an additional nine financial institutions as defendants. However, those entities have since been dismissed voluntarily. See ECF Nos. 152, 155, 178, 179, 180, 181, 189, 231, 246, & 248.

## **B. The '270 Patent**

The '270 Patent was issued on April 4, 2000. It is a continuation-in-part of three other patent applications (No. 09/169,053, No. 08/873,945 and No. 08/694,199), that were filed in the late 1990's. The invention relates to methods and systems that provide electronic account security. The electronic account security is accomplished by (a) allowing restrictions to be placed on an electronic account; and/or (b) providing an account user notification of transactions; and/or (c) generating transaction records for an account user or account.

Plaintiff has related patents that utilize some of the same terms as the '270 Patent. Notably, Plaintiff contends that U.S. Patent No. 6,529,725 ("the '725 Patent") and U.S. Patent No. 7,096,003 ("the '003 Patent) contain much of the same specifications and terms as the '270 Patent.

## **II. LEGAL STANDARD**

Determining the meaning of a patent claim is a matter of law for a judge to decide. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 391 (1996). The scope of the patent, delineated by the claims, defines what rights the patentee has to exclude. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (citing *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)).

Claims are construed from the perspective of a person of ordinary skill in the art of the invention. *Id.* at 1315. The claim words are given their "ordinary and customary reading," which is the meaning understood at the time of invention by a person having ordinary skill in the art. *Id.* at 1312-13. Therefore, courts begin their construction of claims with the intrinsic evidence of a patent and with the same resources that a person of ordinary skill would also review. *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1998).

Intrinsic evidence includes a patent's claims, specifications, and prosecution history. *McDavid Knee Guard, Inc. v. Nike USA, Inc.*, 809 F.Supp.2d 863, 868 (N.D. Ill. 2011) (citing *Phillips*, 415 F.3d at 1313). This evidence is the court's "primary focus in determining the ordinary and customary meaning of a claim limitation." *Phillips*, 415 F.3d at 1316.

With respect to intrinsic evidence, "the most important indicator of the meaning" of a claim term is the context and usage in the claim language itself. *Middleton, Inc. v. Minn. Mining & Mfg. Co.*, 311 F.3d 1384, 1387 (Fed. Cir. 2002). Courts also look at the language of non-asserted claims since the usage of a term in one claim often illuminates the meaning of a term in other claims. *Phillips*, 415 F.3d at 1314 (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)).

Additionally, claims must be read in light of the specification, which include a written description of the patent that enables one skilled in the art to make and use the invention. *Markman*, 517 U.S. at 385-386. The Federal Circuit emphasizes that the specification is critical to review because a "patentee may choose to be his own lexicographer" and assign special definitions to the words in the claims which may be inconsistent with their ordinary meaning. *Vitronics Corp.*, 90 F.3d at 1582.

Another piece of intrinsic evidence is the patent's prosecution history. *Gart v. Logitech, Inc.*, 254 F.3d 1334, 1341 (Fed. Cir. 2001). This is the complete record of proceedings before the Patent and Trademark Office. Such evidence could be relevant to the Court's construction because the applicant may have made express representations regarding the scope of the invention during the prosecution. *Vitronics Corp.*, 90 F.3d at 1582. Furthermore, "the prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution." *Southwall Tech., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995).

If a claim term remains ambiguous after an examination of intrinsic evidence, the court may resort to extrinsic evidence. Extrinsic evidence includes expert and inventor testimony, dictionaries, and learned treatises. *Phillips*, 415 F.3d at 1317. However, extrinsic evidence is less reliable and less persuasive

than intrinsic evidence since such evidence is not part of the patent and was not created concurrently with the prosecution of the patent. *Id.* at 1317-19. Relying on extrinsic evidence is only proper if the claim term remains ambiguous after looking at the intrinsic evidence. *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001).

### **III. ANALYSIS**

The parties have identified the following ten terms in the '270 Patent for the Court's construction: "electronic money account" (Independent Claims 1, 9, 19, 31); "one of . . . and . . ." (Independent Claims 1, 9, 19, 31); "one of a limitation and a restriction" (Independent Claims 1, 9); "processor" (Independent Claims 1, 19); "processing/processes'" (Independent Claims 1, 9, 19, 31); "an [apparatus/method] for providing account security" (Independent Claims 1, 19, (apparatus), Independent Claims 9, 31 (method)); "transaction" (Independent Claims 1, 9, 19, 31); "receiver" (Independent Claim 1); "communication device" (Independent Claims 19, 31); and "notification signal" (Dependent Claim 3). The Court will construct each in turn. See Joint Claim Construction Chart Pursuant to L.P.R. 4.2(f), ECF No. 233.

#### **A. "Electronic Money Account"**

The term "electronic money account" appears in Claims 1, 9, 19, and 31 of the '270 Patent. Joao Bock's proposed construction of "electronic money account" is:

an electronic or digital account for money, cash, credit, currency, electronic payment system or brokerage system, including the following: credit cards, charge cards, debit cards and/or currency or smart cards, electronic money, electronic cards, electronic cash, electronic cash cards, and/or digital cash, digital cash cards, financial accounts for banking, electronic banking, mobile banking, electronic brokerage, brokerage, checking, automated teller machine, electronic checking, savings, money market, electronic payment systems accounts, and/or other similar types of financial accounts, cellular communication accounts, and/or wireless communication accounts, as a person of ordinary skill in the art would understand.

Pl.'s L.P.R. 4.2(c) Resp. Claim Construction Br. at 5. Joao Bock argues this definition is supported by the claim language as well as the specification.

Defendants, on the other hand, argue that the phrase "electronic money account" means "an account for money that is *only* exchanged electronically." Defs.' Opening Claim Construction Br. at 4 (emphasis added). Defendants contend that this is a specific type of account separate and distinct from checking, savings or credit card accounts that may be accessed electronically as well as tangibly. Defendants allege PayPal accounts are an example of such an account. They argue this definition is supported by the term's plain meaning, the specification, and extrinsic evidence. Defendants provide a dictionary definition and a report from the U.S. Department of Treasury that recites definitions of "electronic money" as "money represented, held, and used in electronic form."

See *id.*; Ex. 14, ECF No. 223-16, Page ID #3064. Because the Court finds the term can be defined through the claim language and specification, the Court finds Defendants' reliance on extrinsic evidence inappropriate. See *Interactive Gift Express, Inc.*, 256 F.3d at 1331.

What is more persuasive is Defendants' argument with respect to the doctrine of prosecution history estoppel. Defendants claim Joao Bock cancelled a number of rejected claims during the prosecution of the '270 Patent, and one of those rejected claims included "an apparatus or method for providing security of a wireless communication account." Defs.' Opening Construction Br. at 9. Defendants argue that since the "wireless communication account" claim was rejected, Joao Bock cannot now argue that an "electronic money account" includes wireless communication accounts.

"[T]he doctrine of prosecution history estoppel prevents a patent owner from recapturing through the doctrine of equivalents subject matter surrendered to acquire the patent." *Duramed Pharm., Inc. v. Paddock Labs., Inc.*, 644 F.3d 1376, 1380 (Fed. Cir. 2011). Prosecution history estoppel generally arises, "when an amendment is made to secure the patent and the amendment narrows the patent's scope." *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722, 736 (2009).



After reviewing the prosecution history of the '270 Patent, Defendants are correct. It is apparent that Joao Bock sought initially to have Claim 1 encompass "[a] transaction authorization, notification and/or security apparatus, which comprise[d]: a device for issuing an authorization request for one of a brokerage transaction, an electronic cash transaction and a *wireless communication device*." See J.A., ECF No. 222-1, Page ID# 2300 (emphasis added). This claim was rejected. Claim 1 now reads:

An apparatus for providing account security, comprising: a receiver for receiving one of a limitation and a restriction on usage of an **electronic money account** wherein said one of a limitation and a restriction are received from an account holder . . . a processor for processing a transaction on the **electronic money account** in conjunction with said one of a limitation and a restriction.

'270 Patent, Claim 1, col. 71 lines 1-12 (emphasis added).

In light of this, the Court concludes that an "electronic money account" cannot include wireless communication accounts. To hold otherwise, would effectively broaden Claim 1 to include terms which were rejected explicitly during the '270 Patent's prosecution. Thus, the Court strikes "wireless communication accounts" from Plaintiff's proposed definition.

Defendants next argue that Joao Bock's proposed definition fails because this definition renders the term meaningless. Defendants point out that Joao Bock's proposed construction includes both accounts for electronic money and credit card, charge

card, and debit card accounts. They claim if the Court accepted Plaintiff's definition, this would cause the words "electronic money" to lack meaning.

While at first blush this argument seems convincing, after reviewing the specification, the Court finds this case to be an instance where the inventors acted as their "own lexicographer[s]" and intended the meaning of "electronic money account" to encompass more than accounts that can *only* be accessed electronically. See *AIA Eng'g Ltd. v. Magotteaux Int'l S/A*, 657 F.3d 1264, 1278 (Fed. Cir. 2011) (reinforcing the well-established principle that an inventor can act as his own lexicographer and in those the inventor's lexicography governs). The Court finds the language in dependent Claim 4 particularly persuasive. Claim 4 states:

The apparatus of claim 1, wherein said transaction involves at least one of a good, a service, cash, a cash instrument, a cash derivative, a security, a stock, a bond, a derivative instrument, a stock derivative, a bond derivative, a commodity, a mutual fund share, a future, an option, an index fund derivative, electronic money, electronic cash, electronic currency, digital money, digital cash, digital currency, an electronic money account, a digital money account, an electronic money checking account, an electronic money savings account, an automated teller machine account, a clearing transaction, a check clearing transaction, an account charging transaction, and a charge-back transaction.

'270 Patent, col. 71, lines 34-46.

It is difficult to fathom how an apparatus could provide account security for transactions involving electronic savings and checking accounts if "electronic money accounts" only encompassed accounts like PayPal. In fact, it is worth noting that PayPal accounts did not even exist until December 1998, after Plaintiff's applications for the '270 Patent were filed. Cassidy Emmerson, *The History of Paypal*, (Feb. 13, 2006), <http://voices.yahoo.com/the-history-paypal16349.html>. This timetable makes it unlikely that Plaintiff intended "electronic money accounts" to only include accounts similar to PayPal. See *Energy Transp. Grp., Inc. v. William Demant Holding A/S*, 697 F.3d 1342, 1349 (Fed. Cir. 2012) (words of a claim are generally given their ordinary meaning "that the term would have to a person of ordinary skill in the art in question *at the time of the invention*") (emphasis added). Accordingly, the Court disagrees with Defendants' contention that "electronic money accounts" encompass only electronic money accounts similar to PayPal.

Instead, the Court finds the specification supports Plaintiff's proposed construction. See '270 Patent col. 3 lines 8-30, col. 4 lines 33-43 (stating that the invention provides a method for providing financial transaction authorization and/or security in conjunction with "credit card, charge card, debit card, and/or currency or smart card use, financial account, brokerage account, electronic money account, electronic cash account . . .").

The fact that Plaintiff chose to use the term "electronic money account" in Claims 1, 9, 19, and 31, and "brokerage account" in Claims 11, 18, 32, and 46 does not render the other specifications that reference credit cards and electronic checking and saving accounts meaningless. Accordingly, the Court adopts Joao Bock's proposed definition of the term "electronic money accounts," but strikes the term "wireless communication accounts" from its definition.

**B. "One of . . . and . . ."**

The term "one of . . . and . . ." appears in Claims 1, 9, 19, and 31. Joao Bock's proposed definition is "only one item from the list." *Id.* To illustrate this construction, it provides the following example: "one of A, B, and C means only A or only B or only C." *Id.*

Joao Bock contends that support for this definition lies in another court's construction of one of its related patents, the '725 Patent. The '725 Patent was issued in March 2003 and is a device that provides online notification to an account holder that a transaction is occurring on his bank account. *See Joao v. Sleepy Hollow Bank*, 348 F.Supp.2d 120, 124 (S.D.N.Y. 2004). In *Sleepy Hollow*, the court construed the term "at least one of . . . and . . ." to mean "one or more of one of the items contained in the list." *Id.* at 126. Joao Bock argues that the Court should apply the same definition to the term here.

Defendants construe the term "one of . . . and . . ." to mean "one of each item on a list." Defs.' Opening Claim Construction Br. at 10. To illustrate, they allege that "one of A, B, and C means one A, one B and one C." *Id.* Defendants claim this definition is supported by plain meaning and the specification and argue the court's construction in *Sleepy Hollow* is inapplicable because the term in that case is distinguishable from the one here.

With respect to the applicability (or lack thereof) of *Sleepy Hollow*, Defendants are correct. In that case, the court construed the term "at least one of . . . and . . ." *Sleepy Hollow*, 348 F.Supp.2d at 126 (emphasis added). The term here omits the words "at least." In light of this distinction and the fact that the court in *Sleepy Hollow* stated explicitly that its decision had "absolutely no precedential value for any other patent," causes the Court to decline Plaintiff's request to simply adopt the *Sleepy Hollow* court's construction. *Id.* Instead, the Court looks to the claim language and specification for guidance.

Claim 9 of the '270 Patent provides:

A method for providing account security, comprising: receiving **one of** a limitation **and** a restriction on usage of an electronic money account, wherein said **one of a** limitation **and** a restriction are received from an account holder;

storing said **one of** a limitation **and** a restriction;

processing a transaction on the electronic money account in conjunction with said **one of** a limitation **and** a restriction; and

generating a first signal, wherein said first signal contains information for **one of** approving **and** disapproving the transaction.

'270 Patent, Claim 9, col. 72, lines 9-21 (emphasis added).

If the Court simply examined the plain and ordinary meaning of the phrase, Defendants construction of the terms would be correct. *See, SuperGuide v. Direct TV Enters., Inc.*, 358 F.3d 870, 886 (Fed. Cir. 2004) (citing William Strunk, Jr. & E.B. White, *The Elements of Style* 27 (4th Ed. 2000)) (stating "[a]n article of a preposition applying to all the members of the series must either be used only before the first term or else be repeated before each term."). Here, the phrase "one of" precedes a list or a pair of items and Joao Bock chose to separate the items using the word "and," which implies a conjunctive list.

However, if the Court were to adopt this definition, this would render a substantial portion of Plaintiff's claims meaningless. For example, take the phrase "wherein said first signal contains information for **one of** approving **and** disapproving the transaction." '270 Patent, Claim 9, col. 72, lines 9-21 (emphasis added). A single signal would both approve and disapprove a single transaction. The same holds true for the phrase, "transmitting said second signal **one of** to the account holder **and** to a communication device associated with the account

holder." '270 Patent, Claim 31, col. 75, lines 16-26 (emphasis added). To interpret this phrase to mean that a signal must transmit to both an account holder and also a communication device associated with the account holder is duplicative. Thus, the Court finds the phrase, "one of . . . and . . ." means "one or more of the items in the list" or "either or both of the items in the list."

Additional support is found in the specification. See '270 Patent Col. 9, Lines 10-13 ("the present invention provides an apparatus and a method to prevent **and/or** drastically limit fraudulent **and/or** unauthorized use of credit cards . . .") (emphasis added). The specifications continue in this vein, making repeated references to the "Internet and/or the World Wide Web," and to communication devices that "receive and/or transmit signals, data, and/or information . . ." *Id.* at Col. 11, line 16; Col. 12, lines 23-25.

Finally, the Court finds support in *Sun Pharmaceutical Industries, Ltd. v. Eli Lilly and Company*, 611 F.3d 1381 (Fed. Cir. 2010). There, the Federal Circuit reaffirmed its holding in *Phillips* and held that the courts should construe claim terms "in light of the entirety of the patent, including its specifications . . . [and] [t]he construction that stays true to the claim language and most naturally aligns with *the patent's description* of the invention will be . . . the correct construction." *Id.* at 1388

(citations omitted). The '270 Patent is summarized as "an apparatus and a method for providing financial transaction authorization, notification and/or security, and in particular, provides an apparatus and a method for providing financial transaction authorization, notification, and/or security . . . ." '270 Patent, col. 4, lines 30-36. This description aligns with the Court's construction of "one of . . . and . . . ." and avoids a hyper-technical construction that would result in an absurd meaning. See *Lisle Corp. v. A.J. Mfg. Co.*, 398 F.3d 1306, 1313-1314 (Fed. Cir. 2005).

Therefore, in the context of the '270 Patent, the Court defines the phrase "one of . . . and . . . ." in connection with a list or a pair of items to mean "one or more of the items in the list" or "either or both of the items in the list." Like the Court in *Sleepy Hollow*, the Court notes that this definition is adopted solely for the claims in the '270 Patent and has no precedential value for other patents. *Sleepy Hollow*, 348 F.Supp.2d at 126.

### **C. "One of a Limitation and a Restriction"**

The phrase "one of a limitation and a restriction" appears in Claims 1 and 9. Joao Bock's proposed definition is, "only a limitation as defined herein or only a restriction as defined herein." Joint Claim Construction Chart at 4; ECF No. 233 at Page ID#3847. Joao Bock then defines limitations or restrictions as things "that limit[] or restrict[] or something that bounds or



restrains or confines within bounds or a restraining or confining or bounding rule or a condition or a restraint.” *Id.* Joao Bock explains that the terms are defined in the specification and that the specification indicates the terms are to be used “interchangeably.” Pl.’s L.P.R. 4.2(c) Resp. Claim Construction Br. at 12.

Defendants do not propose a definition for this term and instead argue the term is “insolubly ambiguous.” Defs.’ Claim Construction Br. at 13. They contend that because neither the claims nor the specification distinguish a “restriction” from a “limitation,” a person of ordinary skill in the art would not be able to do so, and this renders the entire term indefinite.

The Federal Circuit directs courts to apply general principles of claim construction when determining whether a term is indefinite. *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332-33 (Fed. Cir. 2010). That is, the Court will first consider the intrinsic evidence “consisting of the claim language, the specification, and the prosecution history.” *Biosig Instruments, Inc. v. Nautilus, Inc.*, No. 2012-1289, 2013 WL 1776745 at \*4 (Fed. Cir. Apr. 26, 2013). A claim is indefinite only if it is “not amenable to construction” or “insolubly ambiguous.” *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005).

In relevant part Claim 9 reads, “[a] method for providing account security, comprising: receiving **one of a limitation and a**

**restriction** on usage of an electronic money account, where said **one of a limitation and a restriction** are received from an account holder." '270 Patent, Claim 9, col. 72, lines 9-14 (emphasis added). In light of the Court's prior construction that the phrase "one of . . . and . . ." means either or both of the items in the list, the Court reads the phrase "one of limitation and restriction" as "either a limitation or a restriction or both a limitation and restriction."

As support for its construction, Joao Bock points to the specification. In pertinent part it states:

The **limitations and/or restrictions** may include types of transactions which are allowed and/or authorized, the goods and/or services which may be purchased with the card, the vendors, stores and/or service provider which may be authorized to accept the card, limits on the dollar amounts of transactions pertaining to each authorized vendor, seller and/or service provider, daily spending limits, and/or geographical area or location wherein authorized card use may be limited and/or authorized times for card usage . . .

'270 Patent, Col. 18, lines 11-20 (emphasis added).

Defendants argue the specification does not save the phrase from being indefinite. Defendants rely on *PureChoice v. Honeywell, International, Inc.*, 333 Fed.Appx. 544, 549 (Fed. Cir. 2009) (unpublished) as support. The Court finds Defendants' reliance misplaced. In *Honeywell*, the Federal Circuit determined that two claim limitations were impossible to differentiate and thus were invalid for indefiniteness. *Id.* In making this finding, the

Federal Circuit reasoned that because the inventor had the patent reexamined and during reexamination split a single term into two terms that were identical in meaning, the two claims were indefinite. *Id.* at 548-49.

The phrase here is distinguishable from that in *Honeywell*. Unlike *Honeywell*, in this case, the specification provides a sufficient record for the Court to understand the relationship between "limitation" and "restriction." *Id.* It is clear from the specification that Joao Bock intended the words "limitation" and "restriction" to be used interchangeably. Particularly persuasive is the fact that the two words are separated frequently by the article "and/or." See, e.g., '270 Patent, Col. 18, lines 11-20.

This evidence, combined with the fact that an accused infringer claiming indefiniteness must present "clear and convincing evidence" that the term is indefinite, causes the Court to reject Defendants' indefiniteness argument. See, *Bid for Position, LLC v. AOL LLC*, 601 F.3d 1311, 1317-18 (Fed. Cir. 2010) (declining to find a term indefinite and instead finding "bid" and "value of the bid" had the same meaning because the claim language and specification used the terms interchangeably).

Therefore, the Court finds a person ordinarily skilled in the art would understand the phrase "one of limitation and restriction" to mean "something that limits and/or restricts, and/or something

that restrains, and/or something that bounds or confines within bounds." ECF No. 233 at 4.

#### D. "Processor"

The word "processor" appears in Claims 1, 19, 26, and 51. In relevant part, Claim 1 provides:

. . . **a processor** for processing a transaction on the electronic money account in conjunction with said one of a limitation and a restriction, wherein said **processor** generates a first signal, and further wherein said first signal contains information . . .

'270 Patent, Claim 1, col. 71, lines 2-3; 10-15 (emphasis added).

Joao Bock sets forth the following definition for the term "processor":

a device which performs an operation, an action, or a function, on, with, or regarding, data or information, or a device which performs a number of operations, actions, or functions, on with, or regarding, data or information or a device which performs an operation, an action, or a function, or a device which performs a number of operations, actions, or functions . . .

ECF No. 233 at 4.

Joao Bock contends this definition is supported by the specification. It references the specification that describes the functions of a "central processing computer." See Pl.'s L.P.R. 4.2(c) Responsive Claim Construction Br. at 15.

Defendants argue that the term "processor" is not disclosed in the specification, and is instead only mentioned in the claims and abstract, which fail to provide guidance. As a result, Defendants

rely on extrinsic evidence and propose that the term "processor" means "that part of a computer containing the circuits required to interpret and execute instructions." Defs.' Claim Construction Br. at 14. Defendants contend this definition is the plain and ordinary meaning of the word.

After examining the specification referenced by Joao Bock, it is clear that its definition is dependent upon the Court equating the term "processor" with "central processing computer." See generally, '270 Patent, Col. 19, lines 8-10, 21-25. However, the Court does not find the two terms synonymous in the context of the '270 Patent. Unlike the terms "restriction" and "limitation" that appear in the same sentence and are regularly separated with the article "and/or," the words "processor" and "central processing computer" are not. As such, the Court declines to adopt the same definition for both terms. See, *Comaper Corp. v. Antec, Inc.*, 596 F.3d 1343, 1348 (Fed. Cir. 2010) (stating that there is an inference that two different terms used in a patent have different meanings).

As Defendants note, the specification does not assign or suggest a particular definition to the term "processor." Therefore, in order to determine the ordinary and customary meaning of the claim term as viewed by a person of ordinary skill in the art, it is appropriate to consult a dictionary definition for guidance. See *Phillips*, 415 F.3d at 1322-23. Defendants provide

a dictionary from McGraw-Hill's *Dictionary of Scientific and Technological Terms*. Defs.' Claim Construction Br. at 15 citing McGraw-Hill *Dictionary of Scientific and Technological Terms*, 356, 1676 (6th Ed. 2003). It defines "processor" as "a device that performs one or many functions, usually a central processing unit." *Id.* It then defines a central processing unit as "[t]he part of a computer containing the circuits required to interpret and execute instructions." *Id.*

While the Court agrees with Defendants with respect to their reliance on extrinsic evidence, the Court finds that an alternative source more appropriate. It is well established that the relevant inquiry the courts undergo during the claim construction phase is to determine how a person of ordinary skill in the art would define a term *at the time of the patent's filing date*. *Phillips*, 415 F.3d at 1313 (emphasis added). The '270 Patent was filed on August 25, 1997. Accordingly, Defendants' reliance on a source published in 2003 is inappropriate.

In *Symantec Corporation v. Computer Associates International*, the Federal Circuit vacated and remanded a district court's decision on infringement, and reasoned that the lower court defined the word "computer" inappropriately. *Symantec Corporation v. Computer Associates International*, 522 F.3d 1279, 1291 (Fed. Cir. 2008). In redefining "computer," the Federal Circuit referenced the *Dictionary of Computing*. *Id.*

The Court references the same source here. At the time Joao Bock filed the application for the '270 Patent, the *Dictionary of Computing* defined the term "processor" as: "a computer, usually/often the central processor." *Dictionary of Computing* 388 (4th Ed. 1997). It then defined central processor as "[t]he principal operating part of a computer. It is usually defined as the \*ALU (arithmetic and logic unit) and \*the control unit (CU) . . ." *Id.* at 68.

In light of this evidence, the Court finds that a person of ordinary skill in the art of computer science would define the term "processor" to be a "principal operating part of a computer." *Id.*

#### **E. "Processing"/"Processes"**

Related to the term "processor," the words "processing or processes" appear in a number of Joao Bock's claims. Joao Bock urges the Court to define these words to mean the following:

performing an operation, an action, or a function, on, with, or regarding, data or information, or performing a number of operations, actions, or functions, on, with or regarding, data or information, or performing an operation, an action, or a function, or performing a number of operations, actions, or functions

Pl.'s L.P.R. 4.2(c) Resp. Claim Construction Br. at 17.

Defendants argue this construction is disjunctive, confusing, ambiguous, and arbitrary. They propose that the Court define "processing" to mean "assembling, compiling, generating, interpreting, computing and otherwise acting on information in a

computer," and "processes" to mean "assembles, compiles, generates . . ." Defs.' Opening Claim Construction at 15.

Similar to the term "processor," the specifications and claim language do not provide guidance in constructing a definition for the words "processes" and "processing." As a result, the Court references extrinsic evidence to resolve any ambiguities. See *Phillips*, 415 F.3d at 1312. While the *Dictionary of Computing* did not provide a definition for "processing" at the time of the invention, Alan Freedman's, *The Computer Glossary* did. It defined "processing" as "[m]anipulating data within the computer." Alan Freedman, *The Computer Glossary* 422 (6th Ed. 1993). It also noted that "[t]he term [processing] is used to describe a variety of computer functions and methods . . ." *Id.* It defined "process" as, "[t]o manipulate data in the computer," adding that "[t]he computer is said to be processing no matter what action is taken upon the data." *Id.* The Court finds these definitions more understandable than either of the parties' proposed definitions and adopts them for the terms "processing" and "processes."

**F. "An [apparatus/method] for providing account security"**

The next term the parties ask the Court to construct is "an [apparatus/method] for providing account security." This phrase appears in the preambles of asserted independent Claims 1, 9, 19, and 31. The parties dispute whether the preambles are limiting.



Defendants contend the preambles are not limitations. Because of this, they argue that the term does not require construction. Joao Bock avers that the preambles give the claims life and meaning and therefore are proper for the Court to construe.

A preamble is the introductory paragraph that appears in a patent immediately before a claim. See *Bicon, Inc. v. Straumann, Co.*, 441 F.3d 945, 949 (Fed. Cir. 2006). Generally, a preamble is not considered to be a claim limitation if "the claim body describes a structurally complete invention such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention." *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 809 (Fed. Cir. 2002). A preamble is not limiting if it merely provides "a descriptive name to the set of limitations in the body of the claim that completely set forth the invention." *IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1434-35 (Fed. Cir. 2000).

However, there is not a "litmus test that defines when a preamble limits [a] claim[\'s] scope." *Id.* The Federal Circuit instructs that "when the preamble is essential to understand the limitations or terms in the claim body, the preamble limits claim scope." *Id.* Additionally, if an inventor relies on the preamble during the patent\'s prosecution to distinguish the claimed invention from prior art, this transforms the preamble into a claim

limitation. *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368 (Fed. Cir. 2001).

Because the preamble language here does not provide "essential structure or steps" or give vitality to the claims, it is not a claim limitation. *Catalina*, 289 F.3d at 808. The Court finds the preamble and claim language in Claim 31 particularly illuminating. Claim 31 reads, "[a] method for providing account security, comprising: processing a first signal, wherein said first signal contains information corresponding to a transaction occurring on an electronic money account . . ." '270 Patent, Col. 75, lines 16-20 (emphasis added). The highlighted phrase does not provide the essential steps or structure of the '270 Patent and instead only describes the use of the invention. The Federal Circuit has held that preambles of this nature do not limit claims "because the patentability of the apparatus . . . depends on the claimed structure, not on the use or purpose of that structure." *Catalina*, 289 F.3d at 809; see also, *Chicago Mercantile Exch., Inc. v. Tech. Research Grp., LLC*, 721 F.Supp.2d 785, 797 (N.D. Ill. 2010).

It is also worth noting that Joao Bock did not rely on the preamble to distinguish the '270 Patent from prior art. Instead, Joao Bock asserted that its invention was unique because the prior art did not "disclose or suggest storing the one of a limitation and a restriction on the usage or the brokerage account or the electronic money account . . ." J.A. at 56, ECF No. 222-2 at

Page ID #2378. While the Court acknowledges that the applicants stated during prosecution that their invention involved "a method for providing account security," they distinguished their invention from prior works by noting what their method was comprised of, not its use. See *id.* at Page ID #2377 ("applicant submits that Wong, Blonder, or any combination thereof does not disclose or suggest a method for providing account security, comprising receiving one of a limitation and a restriction on usage of a . . ."). Accordingly, the Court finds the preamble language does not limit the invention and therefore does not require construction. See, generally, *STX, LLC v. Brine, Inc.*, 211 F.3d 588, 591 (Fed. Cir. 2000).

#### G. "Transaction"

Defendants argue that the Court should define "transaction" to mean "increasing or decreasing the balance of an electronic money account." Defs.' Opening Claim Construction Br. at 18. Defendants argue that the claim language supports their definition.

However, after examining all of claims in which the word "transaction" appears, the Court finds Defendants have referenced only those claims which support their definition, and ignored those that contradict it. For example, dependent Claim 73 states, ". . . an account usage restriction for one of type of **transaction**, type of one of good, service, security, stock, bond, derivative instrument, authorized to be involved in the **transaction**, one of a goods provider, a service provider, a bank, and financial

institution . . .” ’270 Patent, Col. 81, lines 45-48. Because a transaction could include all of the above, the Court finds Defendants’ proposed definition inappropriately narrow.

Defendants’ reliance on the court’s construction in *Sleepy Hollow* is equally unavailing. In that case, the district court construed the term “banking transaction,” not “transaction.” *Sleepy Hollow*, 348 F.Supp.2d at 130. Thus, the Court declines to rely on *Sleepy Hollow*’s construction for guidance here. See, generally, *Innova/Pure Water, Inc.*, 381 F.3d at 1119.

Joao Bock proposes that the Court define “transaction” to mean “an act, an activity, an action, or a process . . . which is being carried out or performed or which has been carried out or performed.” Pl.’s L.P.R. 4.2(c) Resp. Claim Construction Br. at 18. It argues this definition is supported by the specification. In relevant part, it provides, “the apparatus and method of the present invention may provide for the real-time notification of banking, financial, brokerage, electronic money, electronic cash and/or digital cash, **transactions** involving respective bank financial, brokerage, and electronic currency accounts and enable an account owner to monitor, in real-time, all activity involving his or her bank, financial, brokerage, and/or electronic currency accounts.” ’270 Patent, Col. 9, lines 55-62. The specification continues stating, “[i]t is still another object of the present invention to provide an apparatus and a method providing

authorization, notification and/or security in financial **transactions** and/or wireless communication **transactions** . . .” *Id.* at Col. 13 lines 13-18 (emphasis added).

While the Court finds the above useful in determining that “transaction” includes more than “electronic money accounts,” the Court finds additional evidence necessary in order to determine how a person of ordinary skill in the art would define “transaction.”

Joao Bock urges the Court to look to the prosecution history of the '003 Patent. The '003 Patent is entitled, “Transaction Security Apparatus.” It relates to a memory device for storing limitations or restrictions on an account. Pl.’s L.P.R. 4.2(c) Resp. Claim Constr. Br.; Ex. B. The '003 Patent was issued on August 22, 2006 (nearly five years after the '270 Patent). Defendants argue an examination of the prosecution history of this patent is improper because the statements Joao Bock relies upon are “self-serving” and “litigation-inspired.” Defs.’ Reply at 4. They point out that such statements were filed after the court in *Sleepy Hollow* rejected some of its definitions in construing the terms in the '725 Patent.

This Court agrees and declines to examine the prosecution history of the '003 Patent. *See Phillips*, 415 F.3d at 1318 (explaining that evidence that “is generated at the time of and for the purpose of litigation . . . can suffer from bias that is not present in intrinsic evidence.”); *see also, Lear Siegler, Inc. v.*

*Aeroquip Corp.*, 733 F.2d 881, 889 (Fed. Cir. 1984) (“the litigation-induced pronouncements of [an] inventor . . . have no effect on what the words of that document in fact do convey . . .”). Accordingly, the Court references extrinsic evidence to resolve any remaining ambiguities. See *Meyer Intellectual Properties Ltd. v. Bodum, Inc.*, 552 F.Supp.2d 810, 812 (N.D. Ill. 2008). At the time of the invention, *the Dictionary of Computing* defined the word “transaction” as “[a]n input message to a system that, because of the nature of the real world event or activity that it reflects, requires to be regarded as a single unit of work and must be processed completely or rejected. . . .” *Dictionary of Computing* 509 (4th Ed. 1997). *The Computer Glossary* provided a similar definition. It defined the word “transaction” as an “[a]ctivity or request.” Alan Freedman, *The Computer Glossary*, at 518.

Accordingly, the Court finds a person of ordinary skill in the art would have defined the word “transaction” to mean “an input message, activity, or request.”

#### **H. “Receiver”**

The word “receiver” appears in Claim 1 of the ‘270 Patent. Joao Bock urges the Court to define “receiver” as “a networking interface or a device for receiving a signal, data, information, or a message, or a device, for the reception of a signal, data, information, or a message.” Pl.’s L.P.R. 4.2(c) Resp. Claim

Construction Br. at 21. Defendants propose that the Court construct "receiver" to mean "a device of a banking or financial institution for receiving signals or data from an outside source and converting those signal or data to usable form." Defs.' Opening Claim Construction Br. at 20.

The underlying dispute between the parties appears to be whether a "receiver" must be located at a bank or a financial institution. Defendants argue it must, while Joao Bock insists that the embodiments in the '270 Patent are not limited to financial transactions.

Joao Bock has the better argument. The embodiments of the '270 Patent clearly indicate transactions are not limited to banking transactions. See '270 Patent Figs. 1; 4. Thus, Defendants proposed construction limiting a receiver to banking or financial institutions is inaccurate. See *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 865 (Fed. Cir. 2004) ("a construction that excludes a preferred embodiment is rarely, if ever, correct.") (citations omitted).

Claim 1 of the '270 Patent reads: "an apparatus for providing account security comprising: a **receiver** for receiving one of a limitation and a restriction on usage of an electronic money account, wherein said one of a limitation and a restriction are received from an account holder . . ." '270 Patent, col. 71, lines 1-7 (emphasis added). Dependent Claim 8 states, "the

apparatus of claim 1 further comprising: a **receiver** for receiving a reply signal, wherein said reply signal contains information for one of approving and disapproving the transaction." *Id.* at col. 72, lines 5-8.

The above claims are void of any language that requires a receiver to convert data as Defendants suggest. Thus, the Court rejects Defendants' proposed definition. With respect to Joao Bock's definition, Defendants take issue with the words, "networking interface." They claim that neither the specification nor embodiments support a construction that allows a receiver to be located in cyberspace.

After examining the specification and embodiments, the Court finds neither helpful to resolve this dispute. As a result, the Court references extrinsic evidence to determine how a person of ordinary skill in the art would define "receiver." At the time of the invention, *The Computer Glossary* defined the word, "receiver" as a "[d]evice that accepts signals." Alan Freedman, *The Computer Glossary*, 440 (6th Ed. 1993).

The above definition supports the fact that a receiver is generally not located in cyberspace or on any "networking interface" as Plaintiff suggests. Accordingly, the Court declines to define "receiver" as networking interface and instead defines it as a device that accepts signals, information, data, or other messages.



## I. "Communication Device"

"Communication device" appears in Claims 3, 19, 31, 51, 83, and 85. The parties' dispute focuses on whether a "communication device" must include both a transmitter and a receiver or whether a communication device can include either a receiver or a transmitter. Defendants argue it must include both while Joao Bock contends that it can include either or both.

While Defendants' definition is supported by the plain meaning of the word communication, the Court finds that here again Joao Bock intended to be its own lexicographer. The specification provides:

the apparatus also comprises a cardholder **communication device which may receive** signals and/or data from either or both of the point-of-sale device and/or the central processing computer. The **communication device may also be equipped with a transmitter for transmitting signals and/or data to the central processing computer.** In this regard, the central processing computer transmits signals and/or data to the communication device as well as receives signals and/or data from the communication device. The communication device may also transmit signals and/or data directly to the point-of-sale device and receive signals and/or data directly from the point-of-sale device.

'270 Patent, Col. 5, lines 20-31 (emphasis added).

The above language indicates that the communication device in the '270 Patent may include a receiver, a transmitter, or both. Furthermore, Claim 19 provides, ". . . a transmitter for transmitting said second signal one of to the account holder and to

**a communication device** associated with the account holder, where said second signal provides notification of the transaction.” *Id.* at col. 73, lines 50-55 (emphasis added). In light of the above, the Court defines “communication device” as a device which transmits and/or receives signals, data, information or messages.

The Court acknowledges that this definition was rejected by the district court in *Sleepy Hollow* when it constructed the term “communication device” in the ‘725 Patent. *Sleepy Hollow*, 348 F.Supp.2d at 126-27. There, however, the court was faced with specification language that read, “[w]herein the limitation or restriction is transmitted to a receiver from a communication device associated with an individual account holder.” *Id.* at 127 citing ‘725 Patent, col. 48, lines 29-31. The specification language here is distinct. Accordingly, the Court declines to adopt the court’s construction of a communication device in *Sleepy Hollow* and instead finds Plaintiff acted as its own lexicographer when it defined a communication device as a device which transmits and/or receives signals, data, information or messages. See *Thorner v. Sony Computer Entertainment America LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (when a patentee acts as its own lexicographer and clearly sets forth a definition that deviates from the plain and ordinary meaning, the patentee’s definition controls).

## J. "Notification Signal"

Notification signal appears in dependent Claim 3 of the '270 Patent. Claim 3 recites, "[t]he apparatus of claim 1, further comprising . . . a transmitter for transmitting a **notification signal** to a communication device associated with the account holder." '270 Patent, 71, lines 20-24. Joao Bock defines the term as:

a separate message that provides information which reports an occurrence of a transaction on or involving an account or a message which serves to alert one to an occurrence of a transaction on or involving an account

Pl.'s L.P.R. 4.2(c) Responsive Claim Construction Br. at 24.

Defendants argue that notification signal means "a separate series of electronic pulses sent to an account holder containing data reporting the occurrence of a transaction on an electronic money account." Defs.' Opening Brief at 24.

After examining the intrinsic evidence, the Court finds Joao Bock's definition more appropriate. The claim language and specification are void of any language which suggests that a notification signal must be a series of electronic pulses. Instead, the specification states, "the apparatus may communicate with the desired individual by utilizing multiple **notification** and/or reporting avenues and/or devices so as to provide and to ensure that best efforts are to be made to communicate with the desired individual as soon as possible." '270 Patent, Col. 12,

lines 7-13; see also *id.* at lines 25-28 (stating that the present invention may receive and/or transmit signals to provide notification for "a plurality of any of the accounts described herein."). This language aligns with Joao Bock's proposed construction. As a result, the Court defines notification signal to mean "a separate message that provides information which reports an occurrence of a transaction on or involving an account, or a message which serves to alert one to an occurrence of a transaction on or involving an account."

#### **IV. CONCLUSION**

The Court finds that a person having ordinary skill in the art would construe the terms at issue as stated herein.

**IT IS SO ORDERED.**



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Harry D. Leinenweber, Judge  
United States District Court

Date: 6/24/2013