

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ASKELADDEN L.L.C.,
Petitioner,

v.

LIBERTY PEAK VENTURES LLC,
Patent Owner.

Cases IPR2023-00421 and IPR2023-00422
U.S. Patent No. 7,837,100 B2 and 8,905,301 B2

SUPPLEMENTAL EXPERT DECLARATION OF IVAN ZATKOVICH
IN SUPPORT OF REPLY TO PATENT OWNER'S RESPONSE FOR
U.S. PATENT NO. 7,837,100 B2 (IPR2023-00421) AND
U.S. PATENT NO. 8,905,301 B2 (IPR2023-00422)

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EXHIBIT LIST*

<u>EXHIBIT NO.</u>	<u>DESCRIPTION</u>
Ex1001	U.S. Patent No. 7,837,100 B2 to Bonalle et al. (“ <u>the ’100 Patent</u> ”)
Ex1002	U.S. Patent No. 8,905,301 B2 to Bonalle et al. (“ <u>the ’301 Patent</u> ”)
Ex1003	Expert Declaration of Ivan Zatkovich in Support of Petition for <i>Inter Partes</i> Review of Claims 1-17 of U.S. Patent No. 7,837,100 B2 and Claims 1-20 of U.S. Patent No. 8,905,301 B2 (“ <u>Zatkovich Decl.</u> ”)
Ex1004	<i>Curriculum Vitae</i> of Ivan Zatkovich
Ex1005	Prosecution History of the ’100 Patent (U.S. App. No. 11/478,140) (“ <u>the ’140 Application</u> ”)
Ex1006	Prosecution History of the ’301 Patent (U.S. App. No. 12/907,955) (“ <u>the ’955 Application</u> ”)
Ex1007	U.S. Pat. Pub. No. 2007/1098404 A1 to Hirka et al. (“ <u>Hirka ’404</u> ”)
Ex1008	U.S. Pat. Pub. No. 2004/0225604 A1 to Foss et al. (“ <u>Foss</u> ”)
Ex1009	WIPO Pub. No. WO 02/21374 A1 to Hirka et al. (“ <u>Hirka</u> ”)

<u>EXHIBIT NO.</u>	<u>DESCRIPTION</u>
Ex1010	U.S. Patent No. 6,330,546 B2 to Gopinathan et al. (“ <u>Gopinathan</u> ”)
Ex1011	“Financial transaction card originated messages – Interchange message specifications – Part 1: Messages, data elements and code values”, ISO 8583-1, First Edition (published June 15, 2005) (“ <u>ISO Standard 8538-1</u> ”)
Ex1012	Declaration of Glenn J. Perry (“ <u>Perry Decl.</u> ”)
Ex1013	Letter Agreement Between Glenn J. Perry and Askeladden L.L.C. dated May 20, 2020
Ex1014 **	Supplemental Declaration of Ivan Zatkovich in Support of Reply to Patent Owner’s Response For U.S. Patent No. 7,837, 100 B2 (IPR2023-00421) and U.S. Patent No. 8,905,301 B2 (IPR2023-0422) (“ <u>Supp. Decl.</u> ”)
Ex1015**	“Available Balance”, <i>Investopedia</i> (Dec. 23, 2008), Archive available at: https://web.archive.org/web/20081223205618/https://www.investopedia.com/terms/a/available-balance.asp (“ <u>Investopedia: Available Balance</u> ”)
Ex1016**	Glenn Gimble, “From the Examiner’s Desk: Unfair and Deceptive Acts and Practices: Recent FDIC Experience”, <i>Supervisory Insights</i> (Winter 2008) (“ <u>Supervisory Insights</u> ”), available at: https://www.fdic.gov/regulations/examinations/supervisory/insights/siwin08/siwinter08-article3.pdf

<u>EXHIBIT NO.</u>	<u>DESCRIPTION</u>
Ex1017**	“Line of Credit,” <i>Investopedia</i> (April 4, 2005), Archive available at: https://web.archive.org/web/20050404131756/https://www.investopedia.com/terms/l/lineofcredit.asp (“ <u>Investopedia: Credit Line</u> ”)

* Petitioner Askeladden L.L.C. filed simultaneously two related Petitions in IPR2023-00421 and IPR-00422. Because exhibits overlapped, the same exhibit list was used for both Petitions, and is being commonly maintained for ease of reference.

**** Newly submitted exhibits.**

I, Ivan Zatkovich, declare as follows:

615. I previously executed a Declaration on December 29, 2022 (Ex1003, ¶¶1-614, “**Original Declaration**”) in support of the Petition for Inter Partes Review IPR2023-00421 of Claims 1-17 of U.S. Patent No. 7,837,100 B2 (“**the ’100 Patent**,” Ex1001), and of the Petition for Inter Partes Review IPR2023-00422 of Claims 1-20 of U.S. Patent No. 8,905,301 B2 (“**the ’301 Patent**,” Ex1002). This declaration supplements the Original Declaration with respect to both the ’100 Patent and the ’301 Patent.

616. With respect to IPR2023-00421, relating to the ’100 Patent, I have been asked to consider the arguments set forth in the **Patent Owner Response**, dated October 10, 2023 (Paper 9) (the “**421 POR**”).

617. With respect IPR2023-00422, relating to the ’301 Patent, I have been asked to consider the arguments set forth in the **Patent Owner Response**, dated October 10, 2023 (Paper 9) (the “**422 POR**”).

I. **Additional Information Considered**

618. In preparing this Supplemental Declaration, I have reviewed the same information I previously referenced in my original Declaration (Ex1003, ¶¶6-9) as well as the information discussed below.

619. With respect to IPR2023-00421, I also have reviewed the Institution Decision (Paper 7) and the 421 POR (Paper 9). I have further reviewed industry

sources as to the meaning of certain terms, including “Available Balance, Definition and Comparison to Current Balance”, *Investopedia* (Ex1015, “**Investopedia: Available Balance**”) as well as other resources such as Glenn Gimble, “From the Examiner’s Desk: Unfair and Deceptive Acts and Practices: Recent FDIC Experience”, *Supervisory Insights* (Winter 2008) (Ex1016, “**Supervisory Insights**”) and “Line of Credit,” *Investopedia* (Ex1017, “**Investopedia: Line of Credit**”).

620. With respect to IPR2023-00422, I have reviewed the Institution Decision (Paper 7), the 422 POR (Paper 9), as well as exhibits Ex2001 and Ex2002 submitted in support of the 422 POR.

621. For both IPR2023-00421 and IPR2023-00422, I also base this Supplemental Declaration on my knowledge from over thirty years of direct experience in diverse areas including point-of-sale and payment processing systems, credit card and smart card payment transactions, and industry practices and standards for processing purchase transactions and authenticating participants. For purposes of this Supplemental Declaration, I have modified my definition of a POSITA as set forth in paragraphs 159-161 of my Original Declaration to conform with the Institution Decision in both IPRs. Even with this modification, the opinions expressed in my original declaration have not changed.

II. **Discussion of the Patent Owner Response (Paper 9) in IPR2023-00421 (U.S. Patent No. 7,837,100 B2)**

A. **Gopinathan Discloses the Use of Demand Deposit Accounts and Overdraft Accounts Associated with Debit Cards**

622. The Patent Owner's analysis focuses solely on claims 1 and 15, which have similar limitations.

623. Claim 1 of U.S. Patent No. 7,837,100 (the '100 Patent) provides:

[**'100-1PRE**] A method comprising:

[**'100-1A**] authenticating, by a processing device, a transaction requested by a debit card against at least one of a demand deposit account associated with the debit card or an overdraft account **associated with the debit card**, wherein the authentication includes fraud assessment, and

[**'100-1B**] wherein the fraud assessment includes communication with data sources via a network; and

[**'100-1C**] updating, by the processing device, information regarding **at least one of the demand deposit account and the overdraft account** based on the transaction.

(Ex1001, Claim 1) (unless otherwise noted, bracketed material and bold added throughout).

624. Claim 15 of the '100 Patent provides:

[**'100-15PRE**] A tangible computer-readable medium having stored thereon computer executable instructions that, if executed by a computing device, cause the computing device to perform a method comprising:

[**'100-15A**] authenticating, through authorizing including fraud assessment, a transaction requested by a debit card against at least one of a demand deposit account that has been associated with the debit card and an overdraft account that has been **associated with the debit card**,

[**'100-15B**] wherein the fraud assessment includes communication with information sources via a network; and

[**'100-15C**] updating information regarding **at least one of the demand**

deposit account and the overdraft account based on the transaction.
(Ex1001, Claim 1).

625. I understand from my review of the 421 POR (Paper 9) that Patent Owner is challenging whether Gopinathan teaches its system applies to debit cards in addition to credit cards, and even if it does, whether such cards are associated with demand deposit accounts or overdraft accounts, with respect to claims elements [’100-1A/15A] and [’100-1C/15C]. (421 POR at 8-9, 11-12).

1. Elements [’100-1A/15A]

626. In the 421 POR, after walking through definitions of various financial terms, Patent Owner concludes that “while Gopinathan may describe performing a fraud detection analysis against a credit card account, Gopinathan does not teach performing such analysis against a demand deposit account or an overdraft account associated with a debit card, as required by claim 1 [element [’100-1A]].” (421 POR at 9). The 421 POR makes the same argument with respect to element [’100-15A]. (421 POR at 12).

627. I disagree with Patent Owner’s analysis and conclusion.

628. Element [’100-1A] requires “authenticating, by a processing device, a transaction requested by a debit card against at least one of a demand deposit account associated with the debit card or an overdraft account **associated with the debit card**, wherein the authentication includes fraud assessment.” (Ex1001, Claim 1).

629. Element [’100-15A] similarly requires “authenticating, through authorizing including fraud assessment, a transaction requested by a debit card against at least one of a demand deposit account that has been **associated with the debit card** and an overdraft account that has been associated with the debit card.” (Ex1001, Claim 15).

630. As discussed in my original declaration, Gopinathan teaches the “overall functional architecture of system 100” is shown by Figure 8, which includes a “**transaction processing component 802**” that “**determines the likelihood of fraud for each transaction** by feeding data from various sources 805, 806 into neural network 108, obtaining results, and outputting them”. (Ex1010, 4:79-83, 5:4-7, Fig. 14; see Ex1003, ¶¶104, 182).

631. My understanding is that Patent Owner, with respect to element [’100-1A/15A], disputes that Gopinathan (1) teaches processing transactions related to “debit cards”; and (2) teaches either a “DDA” or “overdraft account” associated with such card. (421 POR at 8-9, 12). I discuss each of these in turn.

a. Gopinathan’s Teachings Apply to Debit Cards

632. In my opinion, Gopinathan teaches applying its transaction processing to requests by more than “credit cards.” As I explained in my Original Declaration, a POSITA at the time of the July 5, 2005 invention would understand that Gopinathan’s teachings apply not merely to “credit cards”, but to “debit cards” as

well. (Ex1003, ¶169). Indeed, Gopinathan explains that the phrase “credit card transactions” is used “for illustrative purposes,” and that **“the techniques and principles of the reference” also apply to “charge cards, bank automated teller machine cards and telephone calling cards”**. In my opinion, a POSITA at the time of the July 5, 2005 invention would understand from this language that Gopinathan includes accounts associated with “debit card[s]”, *i.e.*, demand deposit accounts and overdraft accounts. (See Ex1010, 1:37-41; *see also id.*, 3:51-56; Ex1003, ¶¶169, 185 (emphasis added)). The Patent Owner’s response in the 421 POR not only completely ignores this discussion but also offers no evidentiary support contradicting this clear teaching.

633. Furthermore, as discussed throughout my Original Declaration, a POSITA at the time of the July 5, 2005 invention would understand that debit cards and “charge cards”, as discussed in Gopinathan, “use the same networks” and the “same standardized transaction requests”. (Ex1003, ¶¶169, 172). My opinion of a POSITA’s understanding of transaction systems at the time of the July 5, 2005 invention is reinforced by Hirka (Ex1009), which explains:

When the consumer wishes to make a purchase from a merchant, the **debit card is swiped at the point of sale as a credit card would be**, except the funds used to pay the merchant are deducted from the cardholders checking account rather than paid from a third party credit network.

(Ex1009, p.1; *see also* Ex1007, Hirka '404, [0004]) (cited by Ex1003, ¶170).

634. To the extent that Gopinathan is deemed to merely teach that the card is a “credit card”, as Ground II, it would in any event be obvious to use the same fraud techniques taught in Gopinathan for debit card processing in view of Hirka (Ex1009), as I explained in paragraph 190, among others, in my Original Declaration, and in paragraphs 650-663, *infra*.

b. The Term “Available Credit” and “Credit Line” as used in Gopinathan (Ex1010) is Consistent with the Use of an Overdraft Account

635. With respect to Patent Owner’s second point, Gopinathan teaches that the cards in question are associated with both DDAs and overdraft accounts, since the database 805 includes information regarding “available ... balance” (which relates to DDAs) and “credit line” (which relates to overdraft accounts):

Transaction processing component 802 reads current transaction data and customer data from databases 805, 806, ... The current transaction data from database 805 typically includes information such as: transaction dollar amount; date; time (and time zone if necessary); approve/decline code; cash/merchandise code; **available credit (or balance); credit line;** merchant category code; merchant ZIP code; and PIN verification (if applicable).

(Ex1010, 24:33-59).

636. Patent Owner asserts that “‘available credit (or balance)’ refers to the available credit or balance of the credit card account that is being used for the

transaction, while the ‘credit line’ is simply the maximum amount that may be charged against the credit card account,” citing to paragraph 190 of my Original Declaration (Ex1003). (421 POR at 9). The Patent Owner takes out of context the argument presented in paragraph 190 of my Original Declaration (Ex1003), which does not discuss the definition of those terms but why, with respect to Ground II, even if Gopinathan is deemed not to anticipate the ’100 Patent, it would in any event be obvious to a POSITA at the time of the July 5, 2005 invention to modify Gopinathan to apply to more than “credit cards”. Hirka teaches that even “credit cards” were known to be set up to “handle overdrafts.” (Ex1009, 7:10-12). I noted that Gopinathan utilizes data commonly associated with overdraft accounts such as “available credit” and “credit line.” (Ex1003, ¶190, citing Ex1010, 1:29-31; 24-44-47; *see also* Ex1007, [0006]; Ex1009, 2:6-9 (*accord*); Ex1005, 99; *see also* Ex1016, Ex1017).¹

637. In my opinion, Patent Owner thus misses the point that the “available credit” and “credit line” information are used by the overdraft account associated with the card that is being processed. Thus, in embodiments taught by Gopinathan where the card is a debit card, as discussed above, in my opinion, a POSITA at the time of the July 5, 2005 invention would understand that the “available credit” and

¹ I note that Gopinathan in that same discussion also utilizes data commonly associated with DDAs (such as “available ... balance”). *See* ¶633, *infra*.

“credit line” information in the database 805 shows that when the transaction requested by the debit card is more than otherwise available, it would go against an overdraft account.

638. Consistent with my understanding of how the “credit line” information would have been understood by a POSITA at the time of the July 5, 2005 invention, a “line of credit” (which is synonymous with “credit line”) was commonly used by banks and other financial institutions, not just those offering credit card accounts. As Investopedia from that time period explains, the term “line of credit” refers to “[a]n arrangement between a **financial institution (usually a bank)** and a customer establishing a maximum loan balance that the bank will permit the borrower to maintain.” (Ex1017). “Credit line” is not a term limited to credit card accounts. Indeed, as Patent Owner itself recognizes, examples of overdraft accounts at the time of the July 5, 2005 invention included a “credit ... account” (421 POR at 7, citing Ex1001 at 7:29-33), which would be an overdraft account with a credit line.

639. Indeed, during prosecution (Ex1005, at 99), paragraph six from Hirka ’404 was relied upon to show element [’100-1A] was met by the following passage:

Thus, some **debit cards** offer **overdraft protection** in the form of a secondary **line of credit**. A **checking account** accessible **with a debit card**, for example, **may be backed by a credit line** for use in the event that there are insufficient funds in the checking account to cover a purchase.

(Ex1007, [0006], *see also* Ex1009 at 2:6-9 (accord)). This illustrates a typical use at the time of the invention of the term “credit line” as applying to debit cards tied to an overdraft account to cover a purchase. In my opinion, this use of a “credit line” as applying to debit cards tied to an overdraft account to cover a purchase is consistent with how a POSITA would have understood the use of the term “credit line” at the time of the July 5, 2005 invention.

640. Consistent with this usage, the FDIC, shortly after the time of the invention and consistent with my understanding of how a POSITA would understand the term at the time of the July 5, 2005 invention, explained that “typical overdraft protection practiced” at the time included “including the available balance of an overdraft line of credit (ODLOC) when disclosing a deposit account balance, particularly at automated teller machines (ATMs).” (Supervisory Insight, Ex1016 at 1). As discussed, consistent with the FDIC publication, Gopinathan explicitly teaches that its “principles and techniques” apply to “bank automated teller machine cards”. (Ex1010, 1:37-41).

641. Accordingly, in my opinion, a POSITA at the time of the July 5, 2005 invention would understand that “credit line” information, as used in Gopinathan, would include the available credit of an overdraft account associated with the debit card (such as an ATM card) being used for the transaction.

**c. The Term “Available... Balance” as Used in
Gopinathan (Ex1010) is Consistent with the Use of a
Demand Deposit Account**

642. Next, Patent Owner asserts that “‘available credit (or balance)’ refers to the available credit or balance of the credit card account that is being used for the transaction”. (421 POR at 9). However, in my opinion, a POSITA at the time of the July 5, 2005 invention would understand that “available ... balance”, as used by Gopinathan, also refers to the balance of a checking account (i.e., a DDA, as confirmed by Patent Owner, 421 POR at 7). Thus, in embodiments taught by Gopinathan where the card is a debit card (such as an ATM card), as discussed above, the “available ... balance” information in the database 805 shows that the transaction requested by the debit card would go against the “available ... balance” of a DDA.

643. Indeed, as Investopedia from around the time of the invention confirms, consistent with a POSITA’s understanding at the time of the July 5, 2005 invention, “[a]vailable ... balance” is an industry term related to “[b]alances in a checking or on-demand account where there is a delay in crediting funds to an account”. (Ex1015).

644. Accordingly, in my opinion, a POSITA at the time of the July 5, 2005 invention would understand that the term “available ... balance” as used in

Gopinathan references the balance of a DDA checking account associated with the debit card (such as an ATM card) being used for the transaction.

645. In sum, in addition to the reasons I explained in my Original Declaration, a POSITA at the time of the July 5, 2005 invention would understand that each and every feature of element [’100-1A] is disclosed in Gopinathan.

2. Element [’100-1C/15C]

646. From my review of the 421 POR, I also understand that Patent Owner asserts that Gopinathan does not teach “updating a demand deposit account or an overdraft account associated with a debit card”. (421 POR at 11). I disagree.

647. The Patent Owner’s argument misstates the claim language, which only requires “updating ... **information regarding**” the account, not the account itself. As discussed in my original declaration, Gopinathan explicitly discloses updating the “customer profile database 806 with the new transaction data 1610” “after each transaction” (Ex1010, 25:58-60, 37-38). In my opinion, a POSITA at the time of the July 5, 2005 invention would understand that this teaches updating information regarding the account. (Ex1003, ¶199).

648. Patent Owner likewise mischaracterizes my previous declaration, suggesting that my testimony “means accounts associated with a ‘charge card’ are updated.” (421 POR at 9, citing Ex1003, ¶199). In reality, my testimony stated:

Accordingly, in my opinion, a POSITA at the time of the July 5, 2005 invention would understand that the processing device **updates**

information regarding each of the accounts associated with the charge card (**e.g., the debit card**) being authenticated by Gopinathan. (Ex1003, ¶199). I further explained that “Gopinathan’s update would contain information regarding the DDA or checking account” (Ex1003, ¶201). For the same reasons as discussed above, *see* ¶¶ 635-645, each of the accounts associated with the debit card include, in embodiments, an overdraft account (as Gopinathan teaches using “credit line” and “available credit” data) and a demand deposit account (as Gopinathan teaches using “available ... balance” data). Thus, in my opinion, a POSITA at the time of the July 5, 2005 invention would understand that Gopinathan teaches updating information regarding demand deposit account and/or the overdraft account, each of which are associated with the debit card.

649. Accordingly, in addition to the reasons I explained in my Original Declaration, a POSITA at the time of the July 5, 2005 invention would understand that each and every feature of element [’100-1A] is disclosed in Gopinathan.

B. In any Event, it Would Have Been Obvious to Modify Gopinathan (Ex1010) in View of Hirka (Ex1009) to Include Debit Cards Associated With Overdraft and Demand Deposit Accounts

650. Even if not anticipated, as discussed in my Original Declaration, it would have been obvious to a POSITA at the time of the July 5, 2005 invention to combine the fraud detection processes taught by Gopinathan with a debit card system as taught in Hirka. (Ex1003, ¶¶166,172-177,186-192, 197, 203-205).

651. Patent Owner argues that “the Board should confirm the patentability of claims 1-17 over Gopinathan and Hirka” because “a person of ordinary skill in the art would have no reason to combine these teachings.” (421 POR at 14).

652. As discussed in my Original Declaration, a POSITA at the time of the July 5, 2005 invention would have been motivated to modify Gopinathan to include transaction authentication with respect to an overdraft account as discussed and taught in Hirka because doing so would have protected cardholders and card issuing systems from fraud associated with debit cards with overdraft protection. (Ex1003, ¶171; *see also* ¶¶174-176).

653. Thus, contrary to Patent Owner’s argument, it would have been obvious (and a POSITA at the time of the July 5, 2005 invention would have been motivated to) to combine the fraud detection processes taught by Gopinathan with a “debit card” system as taught in Hirka.

654. Furthermore, to the extent Gopinathan is deemed not to explicitly disclose the use of debit cards, or of overdraft or demand deposit accounts associated with debit cards, in my opinion, a POSITA at the time of the July 5, 2005 invention would have been further motivated to modify Gopinathan to provide its fraud detection in the “debit card” system taught in Hirka in order to expand the reach and applicability of the fraud detection system taught in Gopinathan. This would allow

operators of the system to expand their customer base beyond merely financial institutions offering credit card services.

655. Gopinathan provides “an automated system and method for detecting fraudulent transactions, which uses a predictive model such as a neural network to evaluate individual customer accounts based on learned relationships among known variables.” (Ex1010, 2:41-48).

656. Hirka teaches a transaction system for processing transactions for, among other things, debit cards (such as Hirka’s “linked account card”). As part of the processing of debit card transactions, Hirka includes a processing which authorizes transactions using, *inter alia*, authorization using financial rules:

In step 310, the cardholder may present the linked account card to the merchant. In step 316, the merchant may request authorization from an authorization server through a processing network, such as the VISA™ MASTERCARD™, or other network. . . . The authorization server 130 may also process authorization against this “open to buy” amount using business rules established by the institution issuing the linked account card, **along with other financial rules.**

(Ex1007, [0048-0049]).

657. In my opinion, a POSITA at the time of the July 5, 2005 invention would readily understand that Hirka’s transaction processing system designed to include “financial rules” would be an excellent prospect for Gopinathan to provide fraud detection services.

658. As described in Fig. 14, Gopinathan uses Point-of-Sale transactions (1402 & 1404), past transactions, customer data, and profile data (1404) in its predictive model. (Ex1010, Fig. 14, 25:1-6). All of this data is the same type of data that is readily available in Hirka. (Ex1007, [0033] (describing transaction “initiated by swiping the linked account card at a point of sale (P.O.S.) terminal 110”); *see also* Ex1007, [0083] (“transaction history and daily spending limit information” for individual cardholders is stored by the system)).

659. In my opinion, a POSITA at the time of the July 5, 2005 invention would understand that this fraud detection algorithm of Gopinathan is equally applicable, with little to no modification, to the transactions processed by the embodiments of the systems disclosed in both Gopinathan and Hirka.

660. The teachings in Gopinathan’s Background explaining the desirability of fraud detection services “to screen transactions and isolate those which are likely to be fraudulent” (Ex1010, 2:29-34) would further motivate a POSITA to combine Gopinathan’s fraud detection solution with Hirka’s debit card transaction processing system to mitigate the risk of fraud in the debit card transactions processed by Hirka.

661. I understand that the Patent Owner is asserting that there is no reason to combine Gopinathan’s fraud detection system with Hirka’s debit card processing system. (421 POR at 14). But, without a fraud detection system like that identified in Gopinathan, the Hirka debit card processing system would not be protected

against fraud. In my opinion, this is substantial motivation for a POSITA to make the proposed combination at the time of the July 5, 2005 invention.

662. Therefore, a POSITA would have been motivated to incorporate fraud detection systems, among the financial rules in Hirka's Linked Account Card transactions system. (See Ex1007, [0048-0049]). Doing so would lead to improved fraud detection, something which, in my experience, was then, and still is, extremely important for debit card providers. Given how attractive obtaining fraud detection would have been at the time of the July 5, 2005 invention, a POSITA would have been motivated to modify Gopinathan in light of Hirka to reach these willing customers.

663. Patent Owner further argues that the combination at best only teaches "authenticating a transaction against an available credit limit", 421 POR at 16, I disagree. Specifically, as I discussed above, Gopinathan teaches the use of a database including "credit line" and "available credit" which, as discussed above, ¶¶635-641, *supra*, were commonly used to refer to overdraft accounts, as well as an "available balance", which, as discussed above, ¶¶ 642-645, *supra*, was commonly used to refer to demand deposit accounts. Thus, the authentication taught by Gopinathan would, at least in embodiment having debit cards as disclosed in Hirka, be against the customer's overdraft account and/or the customer's demand deposit account. (Ex1006; *supra*, ¶ 632).

664. Accordingly, in addition to the reasons I explained in my Original Declaration, a POSITA at the time of the July 5, 2005 invention would understand that each and every feature of claims 1-17, as Ground II, are rendered obvious over Gopinathan in view of Hirka.

III. **Discussion of the Patent Owner Response (Paper 9) in IPR2023-00422 (U.S. Patent No. 8,905,301 B2)**

A. **The Plain and Ordinary Meaning of the Term “of” in the ’301 Patent Would Have Been Understood to Be “Associated With” or “About”, not “Belonging To”**

665. Claim 1 of the ’301 Patent provides:

[’301-1PRE] A method comprising:

[’301-1A] receiving, at a computer-based authorization system, a transaction request associated with a debit account, wherein the debit account is associated with a separate account;

[’301-1B] **sending, using the computer-based authorization system, an account information request that includes account information of the separate account;**

[’301-1C] receiving, at the computer-based authorization system, status information of the separate account in response to the account information request; and

[’301-1D] authorizing, using the computer-based authorization system, the transaction request based on the status information.

(Ex1002, Claim 1).

666. Claim 7 of the ’301 Patent Provides:

[’301-7PRE] An article of manufacture including a non-transitory, tangible computer readable medium having instructions stored thereon that, in response to execution by a computer-based authorization system, cause the computer-based authorization system to perform operations comprising:

[’301-7A] receiving, at the computer-based authorization system, a transaction request associated with a debit account, wherein the debit account is associated with a separate account;

[’301-7B] **sending**, using the computer-based authorization system, **an account information request that includes account information of the separate account**;

[’301-7C] receiving, at the computer-based authorization system, status information of the separate account in response to the account information request; and

[’301-7D] authorizing, using the computer-based authorization system, the transaction request based on the status information.

(Ex1002, Claim 1).

667. I understand from my review of the Patent Owner’s Response to IPR2023-00422 (422 POR) that the Patent Owner is principally challenging whether the account information request taught by Foss includes information “**of**” the separate account as required by element [’301-1B/7B].

668. In my opinion, the Patent Owner is misconstruing the term “of” and in any event regardless of which definition is adopted of the term, the information I identified in my Original Declaration as being taught in Foss would be “of” the separate account.

1. The Patent Owner Misconstrues the Term “of”

669. I understand that the Patent Owner in the 422 POR asserts that the term “of” as used in “account information **of** the separate account” should be construed to mean “belongs to” because it is purportedly being used in the “double generative [sic: genitive]” as set forth in the American Heritage Dictionary (Ex2001) definition

of the term “of”. (422 POR, at 6-7). As Patent Owner’s own dictionary explains, the double genitive requires that the “object of the preposition of” be in the “possessive form”:

Usage Note: The “double genitive” construction, *in which a possessive form appears as the object of the preposition of, as in a friend of my father's or a book of mine, is looked down on by some grammarians and usage critics*. But this construction has been used in English since the 1300s and serves a useful purpose. It can help sort out ambiguous phrases like Bob's photograph, which could mean either “a photograph of Bob” (i.e., revealing Bob's image) or “a photograph that is in Bob's possession.” A photograph of Bob’s, on the other hand, can only be a photo that Bob has in his possession and may or may not show Bob's image.

(Ex2001 (emphasis added)).

670. The problem with this construction is that the term “of” is not being used in a “double genitive” form as described by the American Heritage Dictionary. Here “account information of the separate account” does not use a possessive “s” or some other form of possessive like “mine” in the term “separate account”. In other words, the claim is not written in the possessive, such as “account information of the separate account’s”, as would be required to be a double genitive form of “of”. In my opinion, a POSITA at the time of the July 5, 2005 invention, even reading the American Heritage dictionary, would not conclude that “account information of the

separate account” requires the account information to “belong” to the “separate account”, as the Patent Owner asserts.

671. Rather, in my opinion a POSITA at the time of the July 5, 2005 invention, would adopt the more natural construction of the term “of” to mean “associated with” or “connected to.” Such a construction is consistent with Def. Nos. 7 and 8 of the same dictionary offered by the Patent Owner:

7. Associated with or adhering to: *people of your religion*

8. Belong or connected to: *the rungs of a ladder.*

(Ex2001).

B. Under Either Construction, the “Linkage Information” in Foss (Ex1008) is “account information of the separate account” as Used in Elements [’301-1B/7B]

672. In any event, as I explained in my Original Declaration (Ex1003), Foss sends an account information request that includes, e.g., “an account number or account information using ‘linkage between the credit/overpayment component and the stored value component’” (Ex1003, ¶¶385-387, quoting Ex1008, [0017]). In my opinion, a POSITA at the time of the July 5, 2005 invention would understand that the “linkage information” in Foss identified is “account information of the separate account” as used in elements [’301-1B/7B].

673. Curiously, the Patent Owner in presenting its argument quotes various passages of the ’301 Patent for support (422 POR at 4-5), but none of the passages

specify an example of the “account information of a separate account”. Rather, the most that is stated is that “[i]n one example, the account system is retrieved by a card issuer or third party system verifying the information using ***information stored in another database.***” (422 POR at 4-5, quoting Ex1002, 8:52-63, emphasis added). In other words, the “account information of the separate account” is “information stored in another database” used to link the account system to a card issuer or third party system. In my opinion, a POSITA at the time of the July 5, 2005 invention would understand that such information would be the equivalent of the “linkage information” I reference in Foss.

1. Under the Proper Construction of the Term “of”, Foss Teaches Elements [’301-1B/7B]

674. In any event, as I explained in my Original Declaration, Foss sends an account information request that includes, e.g., “an account number or account information using ‘linkage between the credit/overpayment component and the stored value component’” (Ex1003, ¶¶ 385-387). In my opinion, consistent with my Original Declaration, to the extent the term “of” is properly construed as including “associated with” and “connected to”, a POSITA at the time of the July 5, 2005 invention would understand such linkage information is clearly associated with and connected to the “separate account” (the “credit/overpayment component” in Foss). (See Ex1003, ¶¶386-389).

2. The “Linkage Information” Taught by Foss Would be Understood to be Possessed by the Account

675. The Patent Owner offers no explanation why the “linkage information”, which is indisputably linked to the “separate account” (the “credit/overpayment component” in Foss), does not also “belong to” the “separate account.” The entire analysis offered, without any expert support, is that a system can be set up which sends a number other than the account number of the separate account. In my opinion, such analysis is not relevant. Whether an account number or some other linkage information is sent, both numbers would “belong” to the “separate account” which is linked as taught by Foss. Foss clearly teaches sending “linkage information” which, by definition, belongs to the “separate account” to which it is linked. To the extent the term “of” is limited to “belonging to” as Patent Owner, in my opinion, improperly asserts, the linkage information taught by Foss also belongs to the overdraft account to which it is clearly linked.

676. I fail to see an explanation of why “account information of a separate account” would be limited to an “account number”, in contrast to other information that belongs to that account, such as, “information stored in another database” taught by the ’301 patent to link the separate account. (*See* Ex1002, 8:52-63).

677. Thus, in my opinion, while the Patent Owner's proposed construction is wrong, in any event, Foss’s linkage information would be “account information of the separate account” under either construction of the term “of”.

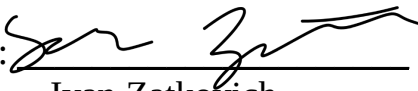
IV. **Conclusion**

678. For the foregoing reasons, and the reasons set forth in my original Declaration (Ex1003), it remains my opinion that Claims 1-17 of the '100 Patent and Claims 1-20 of the '301 Patent are invalid as anticipated and/or obvious.

679. At this time, I am not aware of any arguments and evidence of “secondary considerations” that would render Claims 1-17 of the '100 Patent and Claims 1-20 of the '301 Patent non-obvious. Should the Patent Owner present such evidence, I reserve the right to respond to such evidence and arguments.

I hereby declare that all statements made herein are of my own knowledge and true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code.

Dated: January 3, 2022

By: 
Ivan Zatkovich