

# United States Court of Appeals for the Federal Circuit

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**SOVERAIN SOFTWARE LLC,**  
*Plaintiff-Appellee,*

v.

**NEWEGG INC.,**  
*Defendant-Appellant.*

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2011-1009

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Appeal from the United States District Court for the Eastern District of Texas in case no. 07-CV-0511, Judge Leonard Davis.

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Decided: January 22, 2013

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ROBERT B. WILSON, Quinn Emanuel Urquhart & Sullivan, LLP, of New York, New York, argued for the plaintiff-appellee. With him on the brief were DAVID NELSON and NEIL G. CAVE. Of counsel was PAUL J. RIPP, Williams Montgomery & John Ltd., of Chicago, Illinois.

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FROST and KEVIN M. FONG, Pillsbury Winthrop Shaw Pittman, LLP, of Houston, Texas.

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Before NEWMAN, PROST, AND REYNA, *Circuit Judges*.

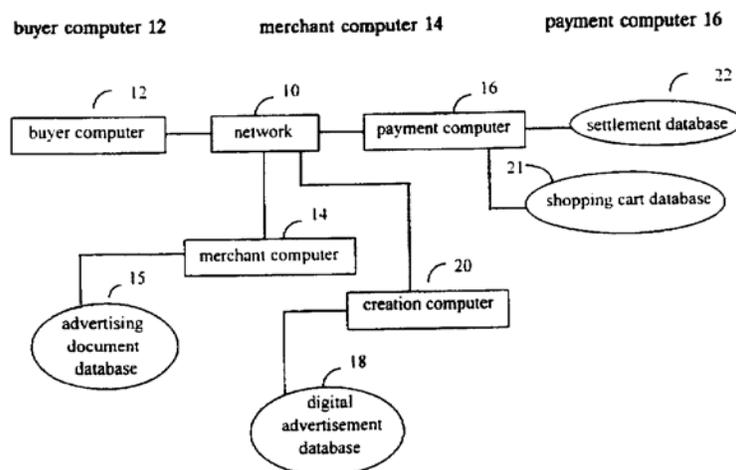
NEWMAN, *Circuit Judge*.

Soverain Software LLC brought this patent infringement suit against Newegg Inc. for infringement of specified claims of United States Patent No. 5,715,314 (“the ’314 patent”), its continuation Patent No. 5,909,492 (“the ’492 patent”), and Patent No. 7,272,639 (“the ’639 patent”). The patents relate to electronic commerce, wherein a merchant’s products are offered and purchased online, through computers interconnected by a network. The patents arise from a software system called “Transact” that was developed in 1996 by a company named Open Market, Inc. The Abstract of the ’314 and ’492 patents describes the subject matter as follows

A network-based sales system includes at least one buyer computer for operation by a user desiring to buy a product, at least one merchant computer, and at least one payment computer. The buyer computer, the merchant computer, and the payment computer are interconnected by a computer network. The buyer computer is programmed to receive a user request for purchasing a product, and to cause a payment message to be sent to the payment computer that comprises a product identifier identifying the product. The payment computer is programmed to receive the payment message, to cause an access message to be created that comprises the product identifier and an access message authenticator based on a cryptographic key, and to cause the access mes-

sage to be sent to the merchant computer. The merchant computer is programmed to receive the access message, to verify the access message authenticator to ensure that the access message authenticator was created using the cryptographic key, and to cause the product to be sent to the user desiring to buy the product.

Figure 1 in the '314 and '492 patents is:



In 2001 Open Market was sold, with the Transact software and patents, to a company named Divine, Inc. Former Divine employee and current Soverain President Katharine Wolanyk testified that the Transact software was “a very complex product” that required constant support services and engineering development, that Divine was unable to provide the necessary support and development, and that Divine declared bankruptcy after fifteen months. Soverain acquired the Transact software and patents. Soverain then sued seven online retailers, including Newegg, for patent infringement. The record states that all of the defendants except Newegg took paid-

up licenses to the patents. Trial Tr. 47 ll.7-25, ECF No. 392.

Newegg declined to pay for a license, stating that its system is materially different from that described and claimed in the patents, and that the patents are invalid if given the scope asserted by Sovereign. Newegg pointed out that similar electronic commerce systems were known before the patented system, that the Transact software was generally abandoned, and that Newegg's system, which is based on the different principle of using "cookies" on the buyer's computer to collect shopping data, is outside of the claims.

Suit against Newegg proceeded in the United States District Court for the Eastern District of Texas.<sup>1</sup> The jury found Newegg liable for infringement of the '314 and '492 patents, and awarded Sovereign damages of \$2.5 million. The jury found that Newegg did not infringe the '639 patent, but the district court granted Sovereign's motion for JMOL of infringement of the '639 patent, and ordered a new trial to assess damages for the '639 patent, to be tried after the completion of appeals. The district court awarded Sovereign post-verdict damages and an ongoing royalty.

After the close of evidence the district court removed the question of obviousness from the jury, the court stating: "I don't think there's sufficient testimony to present an obviousness case to the jury. I think it would be very confusing to them." Trial Tr. 3 ll.9-12, ECF No. 395. The district court then held that the claims are not invalid on the ground of obviousness. Op. at 478-79. Newegg's motions for JMOL or a new trial were denied.

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<sup>1</sup> *Sovereign Software LLC v. Newegg, Inc.*, 836 F. Supp. 2d 462 (E.D. Tex. 2011) (herein "Op.").

## OBVIOUSNESS

Obviousness is a question of law based on underlying facts, as set forth in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The *Graham* factors are (1) the scope and content of the prior art, (2) the difference between the prior art and the claimed invention, (3) the level of ordinary skill in the field of the invention, and (4) any relevant objective considerations. The *Graham* Court explained that “the ultimate question of patent validity is one of law.” *Id.* at 17. Thus on appellate review, the question of obviousness is decided *de novo*. See *Vulcan Eng’g Co. v. Fata Aluminium, Inc.*, 278 F.3d 1366, 1372 (Fed. Cir. 2002) (district court’s application of the law of obviousness to the found facts is reviewed for correctness); *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1351-52 (Fed. Cir. 1998) (“The ultimate determination of obviousness *vel non* is a legal conclusion.”).

Newegg argues that it was wrongfully deprived of a jury determination of the question of obviousness, pointing to the extensive testimony on this issue at trial. However, Federal Rule of Civil Procedure 50 “allows the trial court to remove cases or issues from the jury’s consideration ‘when the facts are sufficiently clear that the law requires a particular result,’” *Weisgram v. Marley Co.*, 528 U.S. 440, 448 (2000) (quoting Wright & Miller, *Federal Practice and Procedure* (2d ed. 1995)). The Court has explained that the purpose of Rule 50 is “to speed litigation and avoid unnecessary retrials.” *Neeley v. Martin K. Eby Const. Co.*, 386 U.S. 317, 326 (1967).

Although here both sides had presented witnesses and evidence on the question of obviousness, the district court’s removal of the legal question from the jury did not violate the right to jury trial. See *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 389 (1996) (“[A]ny credi-

bility determinations will be subsumed within the necessarily sophisticated analysis of the whole document.”). In *KSR International Co., v. Teleflex, Inc.*, 550 U.S. 398, 427 (2007), the Court applied similar principles in its determination of the question of obviousness, stating that: “Where, as here, the content of the prior art, the scope of the patent claim, and the level of ordinary skill in the art are not in material dispute, and the obviousness of the claim is apparent in light of these factors, summary judgment is appropriate” and remand unnecessary.

However, questions of law must be correctly decided, and the district court’s determination of the question of obviousness as a matter of law receives *de novo* determination on appeal. See *Western Union Co. v. MoneyGram Payment Sys., Inc.*, 626 F.3d 1361, 1369 (Fed. Cir. 2010) (reversing judgment of nonobviousness when “[t]he parties’ disputes revolve around whether the prior art taught three specific elements of the claimed inventions, whether there was a motivation to combine these elements with the prior art system, and whether secondary considerations support a finding of nonobviousness.”); *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1327 (Fed. Cir. 2008) (reversing judgment of nonobviousness when defendant “clearly and convincingly established a prima facie case that [the] claims [were] obvious as a matter of law.”); *Inventio AG v. Otis Elevator Co.*, No. 2011-1615, 2012 WL 5907489, at \*5 (Fed. Cir. Nov. 27, 2012) (non-precedential) (reversing judgment of nonobviousness when patent was “a clear example of a ‘combination of familiar elements according to known methods [yielding] no more than . . . predictable results.’” (citations omitted)).

On these premises, we determine the question of obviousness. Newegg relied primarily on a prior electronic commerce system called “CompuServe Mall.” The

district court, sustaining validity of all claims in suit, did not discuss the claims or the prior art; the court stated that Newegg's expert had not presented a prima facie case of obviousness, and criticized Newegg for not presenting "some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." Op. at 479.

The parties divided the claims in suit into three groups, and presented evidence and argument, including expert and other witness testimony, for the claims as grouped. We retain the parties' groupings, as follows:

A

The '314 and '492 patents – the "shopping cart" claims

Soverain asserted claims 34 and 51 of the '314 patent and claim 17 of the '492 patent as a group called the "shopping cart" claims. These claims are directed to the overall system wherein products are offered online by a merchant, a buyer designates products for purchase, and payment for the designated products is initiated upon the buyer's request for checkout, all operating through a computer network. The parties agreed that claim 34 of the '314 patent is representative of this group. Claim 34 follows (with bracketed numbers added):

34. A network-based sales system, comprising:
- [1] at least one buyer computer for operation by a user desiring to buy products;
  - [2] at least one shopping cart computer; and
  - [3] a shopping cart database connected to said shopping cart computer;
  - [4] said buyer computer and said shopping cart computer being interconnected by a computer network;

[5] said buyer computer being programmed to receive a plurality of requests from a user to add a plurality of respective products to a shopping cart in said shopping cart database, and, in response to said requests to add said products, to send a plurality of respective shopping cart messages to said shopping cart computer each of which comprises a product identifier identifying one of said plurality of products;

[6] said shopping cart computer being programmed to receive said plurality of shopping cart messages, to modify said shopping cart in said shopping cart database to reflect said plurality of requests to add said plurality of products to said shopping cart, and to cause a payment message associated with said shopping cart to be created; and

[7] said buyer computer being programmed to receive a request from said user to purchase said plurality of products added to said shopping cart and to cause said payment message to be activated to initiate a payment transaction for said plurality of products added to said shopping cart;

[8] said shopping cart database being a database of stored representations of collections of products, and said shopping cart computer being a computer that modifies said stored representations of collections of products in said database.

At the trial the CompuServe Mall system was the primary reference against the shopping cart claims, including two books describing the system: Bowen & Peyton, *How to Get the Most Out of CompuServe* (4th ed. 1989) and Ellsworth & Ellsworth, *Using CompuServe* (1994). Newegg presented testimony of CompuServe's

former Chief Technology Officer Alexander Trevor, Newegg's expert witness Mr. Edward Tittel, and Newegg's Chief Technology Officer James Wu, who designed the Newegg system.

Mr. Tittel compared claim 34 with the prior art system, element by element. Trial Tr. 55-81, ECF No.394. Mr. Tittel testified that the CompuServe Mall was a "network-based sales system" (claim preamble) in which the buyer computer (clause [1]) interacted with a CompuServe server computer (clause [2]) that stored buyers' product selections in "shopping carts" called personal holding files (clause [3]), all via a computer network (clause [4]). *Id.* 57-60. Mr. Tittel explained that products were added to the personal holding files when the buyer computer sent an order command "O" to the CompuServe server, at which time the server would "update" the personal holding file for each such selection (clauses [5], [6] and [8]). *Id.* 61-63. When the buyer was ready for checkout, the buyer typed "checkout" and was presented with a screen to review the designated items, and with a request to initiate payment (clause [7]). *Id.* 64-65. Mr. Tittel concluded that all of the elements and limitations of Soverain's shopping cart claims were "shown or apparent" in the prior art CompuServe Mall. *Id.* 67 l.25.

Mr. Trevor testified as to the CompuServe Mall system, for which he had been the Chief Technology Officer. According to Mr. Trevor, the CompuServe Mall provided the buyer with access to over a hundred online stores. Trial Tr. 32 ll.21-23, ECF No. 396. Within each store, products were presented in menus. When a buyer found a product of interest, the buyer selected the product from the store menu and a detailed description would be displayed, in some cases with a photograph. *Id.* 33 ll.9-13. If the buyer wanted to purchase the product, the buyer would type the order command "O" and CompuServe

would store the product in the buyer's personal holding file on the server. *Id.* 33 ll.14-17. The buyer could designate up to forty items for placement in the personal holding file. *Id.* 34 ll.8-11. By typing "checkout," the buyer could review selections and modify or delete items in the personal holding file, or proceed to purchase. *Id.* 43 ll.8-17.

Soverain's expert witness Dr. Michael Shamos stated that the Newegg witnesses' description of the CompuServe Mall was "consistent with my understanding," but presented the argument that the CompuServe Mall lacked two elements of the shopping cart claims: first, that the CompuServe system lacked the "shopping cart message [that] comprises a product identifier" of claim clause [5]; and second, that CompuServe lacked the "shopping cart database" of clause [3]. Trial Tr. 154-69, ECF No. 397. Dr. Shamos did not dispute that the other elements of claim 34 were embodied in the CompuServe Mall. We have given particular attention to the two aspects on which the witnesses stated divergent views.

*1. the product identifier message, clause [5]*

Dr. Shamos did not disagree with Mr. Tittel that the CompuServe Mall's "order command" was a "shopping cart message" as in clause [5], and agreed that when a CompuServe Mall buyer entered the order command, the CompuServe server computer would identify the product and place it in a personal holding file for that buyer. Trial Tr. 155 ll.24-25, ECF No. 397; *id.* 165 ll.5-9. However, Dr. Shamos argued that the CompuServe Mall was different because the "product identifier" in the CompuServe Mall was not "in the message." *Id.* 154 ll.9-17. Dr. Shamos stated that the CompuServe Mall system of product identification was based not on the order command itself, but on what the server "knew" based on "previously sent"

messages. *Id.* “It was just an indication that the order key had been—had been hit at that time.” *Id.* 156 ll.2-3. Thus Dr. Shamos argued that the CompuServe order command was not a “message . . . which comprises a product identifier” as required by claim clause [5]. *Id.* 155 ll.2-7.

The distinction proposed by Dr. Shamos and advanced by Sovereign is not embodied in the claims and not reflected in the claim construction. It was not disputed that the CompuServe Mall order command designated a specific product for placement in the buyer’s personal holding file, or shopping cart, as recited in claim clause [3]. *See* Trial Tr. 54, ECF No. 394; Trial Tr. 165 ll.5-9, ECF No. 397. Nor was it disputed that, regardless of how the order command was structured, it conveyed the requisite information to the CompuServe server computer. *Id.* The message set forth in the claims is not distinguished from the message in the CompuServe Mall. The term “product identifier” was not given a special meaning in the specification or through claim construction, and contains no designated format requirements. “No principle of law . . . authorize[s] . . . read[ing] into a claim an element which is not present, for the purpose of making out a case of novelty . . . .” *E.I. DuPont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433 (Fed. Cir. 1988) (quoting *McCarty v. Lehigh Valley R. Co.*, 160 U.S. 110, 116 (1895)).

Sovereign also argues that its system is superior to the CompuServe “order command” because the system of the patents in suit is adapted to the Internet, whereas the CompuServe Mall operated on a pre-Internet network. Trial Tr. 159-162, ECF No. 397. In *Muniauction* this court held that “conducting previously known methods through an Internet web browser was obvious because it amounted to no more than applying the use of the Inter-

net to existing electronic processes at a time when doing so was commonplace.” 532 F.3d at 1327. Precedent agrees with Newegg that a person of ordinary skill<sup>2</sup> could have adapted the CompuServe order command to known browser capabilities when these capabilities became commonplace, and that it was obvious to do so. The product identifier message term does not distinguish the shopping cart claims from the prior art CompuServe Mall.

*2. the shopping cart database, clause [3]*

Dr. Shamos also stated his opinion that the CompuServe Mall did not have a “shopping cart database” as in the claims in suit. Dr. Shamos agreed with Newegg’s expert Mr. Tittel that the CompuServe Mall system included “personal holding files,” and Dr. Shamos agreed that a shopping cart database “might have been a reasonable design choice,” but he opined that such database “wasn’t required” by the CompuServe Mall and that the prior art did not “necessarily disclose a database.” Trial Tr. 167 ll.12-16, ECF No. 397.

The agreed claim construction for “shopping cart database” was “a database of stored representations of collections of products,” where “database means a collection of logically related data stored together by one or more computerized files.” Claim Construction Order 3,

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<sup>2</sup> The parties agreed that the level of ordinary skill in the field of this invention is “a Bachelor of Science degree in computer engineering or computer science, or equivalent education, with two to three years of practical experience developing or operating software and systems that relate to commerce on the Internet.” Plaintiff’s Submission of Joint Proposed Charge of the Court 29-30, ECF No. 289-3; Defendant’s Submission of Joint Proposed Charge of the Court 35, ECF No. 289-4.

ECF No. 214. The use of personal holding files in the CompuServe Mall is easily within this definition. Mr. Tittel testified that the personal holding file in CompuServe Mall was “a shopping cart in a shopping cart database.” Trial Tr. 56 ll.9-10, ECF No. 394. He explained that “[t]he personal holding file itself is a shopping cart. And because CompuServe supported multiple individuals shopping in the same store at the same time, a collection of such files would be maintained, and that would meet the Court’s requirements for a shopping cart database.” *Id.* 56 ll.11-16. In addition, Mr. Trevor testified that the personal holding files in the CompuServe Mall system stored products “specific to each customer” and constituted an “in-memory database.” Trial Tr. 39 ll.7-10, ECF No. 396.

The Ellsworth & Ellsworth book describes the storage of customer product selections in the CompuServe personal holding files. *Using CompuServe* 376, ECF No. 247-10 (“When you find a product that you want to buy, press O for order. Your order will be stored in a personal holding file until you leave that merchant’s store.”). The book further describes that items placed in the personal holding file are not yet purchased, and are held until the buyer types the “checkout” command. *Id.* (“When you are finished shopping in that store, type **checkout**. An electronic order form appears.”).

When Dr. Shamos was asked how a person of skill in the art would have implemented the CompuServe online shopping system other than through a database, he suggested that CompuServe could have used a “fulfillment house,” which would “fill your order and send it to you without ever recording it in a database.” Trial Tr. 168 ll.9-14, ECF No. 397. Whether that alternative was feasible, it is not stated to be what CompuServe did. The Ellsworth & Ellsworth book states that the buyer’s prod-

uct selections are “stored”—not sent “without ever recording it in a database.” The “fulfillment house” alternative proposed by Dr. Shamos does not relate to a personal holding file, and appears to have no relation to either the prior art or the patents. Dr. Shamos conceded that a database would have been a “reasonable design choice” for the personal holding files, and his statements that the prior art did not “necessarily disclose a database” are not evidence of nonobviousness. “Because the patentee is required to define precisely what his invention is . . . it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (citations omitted).

The district court’s conclusion that a prima facie case of obviousness was not met is not explained by the court or by Sovereign, and does not accord with the record. Dr. Shamos did not provide evidence to rebut Newegg’s prima facie case that every claim element was embodied in the prior art.

Although the district court criticized Mr. Tittel’s expert report on the question of obviousness, the trial record contains extensive testimony of the experts for both sides, discussing every claimed element of the patented subject matter and the prior art system. Their testimony was subjected to examination and cross-examination, before decision of the question of obviousness was removed from the jury. Also, precedent does not require “expert” opinions on matters of law. In *Nutrition 21 v. United States*, 930 F.2d 867, 871 n.2 (Fed. Cir. 1991) this court observed that “[a]n expert’s opinion on the ultimate legal conclusion is neither required nor indeed ‘evidence’ at all.” *Avia Group Int’l v. L.A. Gear Cal., Inc.*, 853 F.2d 1557, 1573 (Fed. Cir. 1988) (“an expert’s opinion

on the legal conclusion of obviousness is neither necessary nor controlling”).

We conclude that the prior art CompuServe Mall system, by clear and convincing evidence, rendered obvious the “shopping cart” claims: claims 34 and 51 of the ’314 patent and claim 17 of the ’482 patent. These claims are invalid; the district court’s contrary ruling is reversed.

## B

The ’492 patent – the “hypertext statement” claims

The ’492 patent is a division of the ’314 patent, with the same specification and drawings. Sovereign asserted infringement of claims 41 and 61 of the ’492 patent, called the “hypertext statement” claims. These claims are directed to the aspect of the online shopping system set forth in the patents, in which the client computer receives transaction statements from the server computer, in response to a request from the client computer. The district court included these claims in its ruling of nonobviousness, although the specific subject matter and claims were not mentioned by the court. We thus determine this question of law *de novo*.

Claim 41 is shown below, with claim 15 from which it depends, and bracketed numbers added to each claim clause:

15. A hypertext statement system, comprising:
  - [1] a client computer for operation by a client user; and
  - [2] one or more server computers for operation by a server user;
  - [3] the client computer and the server computers being interconnected by a public packet switched computer network;

[4] at least one of the server computers being programmed to record information pertaining to purchase transaction records in a database, and to transmit a statement document comprising the purchase transaction records to the client computer over the network;

[5] the client computer being programmed to display the statement document to receive a request from the client user to display transaction details corresponding to a portion of the statement document displayed by the client computer, and to cause a transaction detail hypertext link corresponding to the portion of the statement document to be activated;

[6] at least one of the server computers being programmed to respond to activation of the transaction detail hypertext link by transmitting the transaction details to the client computer over the network as a transaction detail document.

41. A hypertext statement system in accordance with claim 15, wherein

[7] the statement document is sent by at least one of the server computer to the client computer in response to a statement URL sent by the client computer to at least one of the server computers.

Newegg argued that claim 41 is rendered obvious by the CompuServe Mall system, for the commonplace sending of a statement of a transaction or receipt, in response to a URL inquiry by the purchaser (claim clause [7]), does not contribute nonobviousness to known systems of e-commerce over the network, (clause [6]). Mr. Tittel's testimony included an element by element comparison of these claims with the CompuServe Mall statement sys-

tem. Trial Tr. 71-76, ECF No. 394. Mr. Tittel testified that in the CompuServe Mall, the client user operated a client computer (clause [1]), and a server user operated a server computer (clause [2]), and the computers were interconnected by a public network (clause [3]). *Id.* 72. The CompuServe server recorded and transmitted purchase information, and provided a “confirmation number” from which buyers could “get all the information about that transaction that you might ever need,” (clause [4]). *Id.* 73 ll.10-22. The client user could request transaction information using the confirmation number (clause [5]), and receive access to such information from the CompuServe system (clause [6]), though not using URLs or hypertext (clause [7]). *Id.* 74 ll.4-5. Mr. Tittel explained that the CompuServe Mall did not employ hypertext or URLs because it pre-dated the Internet and did not use the tools of the World Wide Web, but “[a]nyone who could get access to the text in a transaction record would understand how to use html to present that information at a variety of levels of details.” *Id.* 75 ll.13-18.

At the trial, both sides presented testimony concerning the statement URL (clause [7]). Dr. Shamos argued that the statement URL rendered these claims nonobvious because there was no way of obtaining transaction details online in the CompuServe Mall system. Trial Tr. 173 ll.3-20, ECF No. 397; Soverain Br. 46. Mr. Tittel testified that hypertext and URLs are basic functionalities of the World Wide Web, and that “[a]nyone who wanted to move shopping on the web would know they had to use URLs to tie things together to deliver information.” Trial Tr. 71 ll.4-6, ECF No. 394.

Also in suit was claim 61 of the '492 patent, shown with claims 1 and 60 from which claim 61 depends:

61. A hypertext statement system in accordance with claim 60, wherein the information on transactions by the user includes at least one of the following types of information: a date of transaction, an identification of the product, a payment amount, and a merchant identifier.

60. The method of claim 1, wherein at least one service request comprises a purchase request, the purchase request including an associated user identifier, the method further comprising:

accessing, upon receipt of the purchase request at the server system, user information associated with the user identifier sufficient to charge to an account associated with the user, the purchase price of the product identified by the purchase request;

charging the user for the product identified by the purchase request according to the user information; and

fulfilling the purchase request based on the user information.

1. A method of processing service requests from a client to a server system through a network, said method comprising the steps of

forwarding a service request from the client to the server system, wherein communications between the client and server system are according to hypertext transfer protocol;

returning a session identifier from the server system to the client, the client storing the session identifier for use in subsequent distinct requests to the server system; and

appending the stored session identifier to each of the subsequent distinct requests from the client to the server system.

Newegg points out that the elements of a “statement URL” (claim 41) and general purchase information (claim 61) are “routine modifications that are a part of adapting [the Internet] to an existing system,” and do not render the system nonobvious, citing *Western Union*, 626 F.3d at 1370, where the court held the claimed system of Internet-based money transfer to be obvious, for the prior art money transfers were simply implemented by a newer electronic method that had become commonplace. Reply Br. 4. *See also Muniauction*, 532 F.3d at 1326 (“modification of [bid calculation software] to incorporate web browser functionality represents a combination of two well known prior art elements to a person of ordinary skill in the art.”). Although Sovereign argues that the CompuServe Mall did not disclose “most, if not all, of the elements recited in the hypertext statement claims,” such as a “statement document,” or a “transaction detail document,” Sovereign Br. 46, the record does not support that argument, but rather supports Newegg’s argument that these aspects were performed in the CompuServe Mall system.

Mr. Tittel explained that in the CompuServe Mall, buyers could get all the information about a transaction from the confirmation number. Tr. 73 ll.10-22, ECF No. 394. Sovereign argues that in CompuServe Mall it might be necessary to resort to the telephone or email to get the transaction information, but Newegg states that whatever distinction Sovereign is drawing, it is not a limitation on the claims other than a commonplace Internet capability to facilitate on-line transactions. *See Muniauction*, 532 F.3d at 1327 (holding it obvious to “apply[ ] the use of the

Internet to existing electronic processes at a time when doing so was commonplace.”).

Open Market did not invent the Internet, or hypertext, or the URL. *See* Trial Tr. 196-97, ECF No. 397 (testimony of Sovereign’s expert Dr. Shamos). Newegg is correct that the use of hypertext to communicate a “statement document” or “transaction detail document” was a routine incorporation of Internet technology into existing processes. *See Western Union*, 626 F.3d at 1370-71; *Muniauction*, 532 F.3d at 1327.

We conclude that Newegg presented clear and convincing evidence of obviousness of claims 41 and 61 of the ’492 patent. The district court’s ruling of nonobviousness is reversed.

### C

The ’639 patent – the “session identifier” claims

The ’639 patent is directed to “methods of processing service requests from a client to a server system through a network.” ’639 patent, col.3 ll.6-7. The subject matter is summarized in the ’639 Abstract as follows:

This invention relates to methods for controlling and monitoring access to network servers. In particular, the process described in the invention includes client-server sessions over the Internet. In this environment, when the user attempts to access an access-controlled file, the server subjects the request to a secondary server which determines whether the client has an authorization or valid account. Upon such verification, the user is provided with a session identification which allows the user to access to the requested file as well as any other files within the present protection domain.

Claims 60 and 79 of the '639 patent were in suit, called the "session identifier" claims. The jury found that these claims are not infringed by the Newegg system. On Soverain's motion for JMOL as to claim 79, the district court reversed the verdict and ruled the claim infringed. Claim 60 was not included in Soverain's motion, and is not included on this appeal. Claim 79 follows, shown with claim 78 from which it depends:

79. The method of claim 78, further comprising, in the server system:

receiving an initial service request from the client;

creating, responsive to the initial service request, the session identifier; and

returning the session identifier to the client for storage by the client for use in subsequent requests to the server system.

78. A method of processing, in a server system, service requests from a client to the server system through a network, said method comprising the steps of:

receiving, from the client, a service request to which a session identifier stored at the client has been appended by the client, wherein communications between the client and server system are according to hypertext transfer protocol;

validating the session identifier appended to the service request; and servicing the service request if the appended session identifier is valid.

The parties stipulated that "session identifier" means "a text string that identifies a session," wherein a

“session” is a “series of requests and responses to perform a complete task or set of tasks between a client and a server system.” Claim Construction Order 3, ECF No. 214. Newegg again argues that the district court erred in its ruling of nonobviousness. The court did not discuss the prior art or explain its reasoning, other than to include this patent in the general statement that Newegg had not presented a prima facie case of nonobviousness, and to criticize the expert witness for omitting to provide his conclusions as to validity.

Newegg relies on U.S. Patent No. 5,560,008 to Johnson and U.S. Patent No. 5,724,424 to Gifford, stating that either Johnson alone, or Johnson in view of Gifford, renders obvious the claimed subject matter. Soverain responds that neither Johnson nor Gifford discloses a “session identifier.” Soverain states that the “credential identifier” of Johnson cannot be a “session identifier” because it identifies a “user rather than a session,” and therefore “can cover a portion of a single session or . . . multiple sessions.” Soverain Br. 47. Newegg states, and Mr. Tittel explained at trial, that “the same mechanisms that are used to set up a network login [as in Johnson] apply to establishing a session [as in the ’639 patent].” Newegg Br. 42-43; Trial Tr. 78 ll.17-18, ECF No. 394.

The “credential identifier” is described by Johnson as follows:

A message, called a request for service, is sent from the user client machine to the server remote machine anytime that service is needed on the remote machine. . . . The server builds a set of credentials that represent all of the interesting security facts about the remote user. This information includes the user id, the group id that the user is in, the group set of other group ids that the

user has access to, an account id, the set of privileges of the user that allow the user to bypass the normal security restrictions on the system, etc. The server establishes all of the credentials for the user, and stores this information in a data structure called the credentials structure, and returns a small value (e.g. 64 bits) to the client machine where the user is running. This returned small value is referred to as the credentials identifier.

After the credentials identifier is returned to the user, all the user has to do is to present the credentials identifier to the server in every request requiring authentication that is made of that server. . . .

Johnson patent col.5 l.47-col.6 l.2. The credential identifier in Johnson is “a flexible authentication and authorization process,” col.6 ll.51-54, where the server decides “the length of time that the credential structure will be maintained,” col.6, ll.51-54.

Mr. Tittel testified that the patents to Johnson and Gifford show all of the elements of claims 78 and 79. Trial Tr. 76-81, ECF No. 394. He testified that the “service requests” of the ’639 claims appear in Johnson’s “requests for service.” *Id.* 79 ll.5-6. The ’639 claims refer to “appending” the session identifier to a service request, and Johnson refers to “presenting” the credential identifier in “every request.” *Id.* 81 ll.3-4.

Dr. Shamos testified that the ’639 claims are distinguishable because the Johnson reference pre-dated the World Wide Web. However, Mr. Tittel pointed out that the Gifford reference includes application of the Web to the same effect. *Id.* 80 ll.8-11. Gifford describes a “complete system for the purchasing of goods or infor-

mation over a computer network,” that is “based upon the hypertext conventions of the World Wide Web.” Gifford patent, Abstract; col.4 ll.61-63. Gifford specifically teaches the use of hypertext strings in e-commerce transactions for payment authorization and security, a “transaction identifier” that is a hypertext string used to authenticate a transaction. *Id.* col.11 ll.32-35. Soverain does not dispute that Gifford teaches “additional Internet functionality” not taught in Johnson. Soverain Br. 47.

On the agreed claim construction and the teachings of Johnson and Gifford, we discern no distinction between the session identifier claims and Johnson alone, or Johnson with Gifford. In *KSR* the Court explained:

When we apply the standards we have explained to the instant facts, claim 4 must be found obvious. . . . we see little difference between the teachings of Asano and Smith and the adjustable electronic pedal disclosed in claim 4 of the Engलगau patent. A person having ordinary skill in the art could have combined Asano with a pedal position sensor in a fashion encompassed by claim 4, and would have seen the benefits of doing so.

550 U.S. at 422. We conclude that claim 79 of '639 patent is invalid on the ground of obviousness.

## D

### Secondary Considerations

Before reaching our conclusions regarding obviousness referred to above, we have also considered the matter of secondary considerations. Soverain argues that obviousness of all of the claims in suit is negated by the favorable market response that was achieved by Open Market’s Transact product, which Soverain states received “widespread recognition in the general media,” “an

excellence award from the industry,” and was “widely licensed.” Sovereign Br. 50-51. Newegg responds with evidence that the Transact system was abandoned by its developers and almost all of its original users. Newegg points out that licenses were taken to avoid the costs of litigation, and not to use the flawed Transact system embodied in its software. Newegg Br. 5-6.

The record does not establish a nexus between use of the Transact software and the patents. At trial, former Open Market employee and inventor Alexander Treese testified that Open Market had attempted to license its patents apart from the software, but without success. Trial Tr. 108 l.25-109 l.3, ECF No. 391 (testimony of Alexander Treese stating that patent licensing program went “Not very well.”). The record shows that the software was abandoned by almost all of its initial licensees, Trial Tr. 23 ll.12-25, ECF No. 392 (testimony of Sovereign’s President Katherine Wolanyk), and is not used by those who bought litigation peace, *compare id.* 38 ll.12-15 (listing current licensees of Transact) *with id.* 47 ll.17-18 (listing companies that settled after being “contacted first with a lawsuit”). The assertions of commercial success as here presented do not support nonobviousness.

#### SUMMARY

The claims in suit of the ’314 and ’492 patents are invalid for obviousness over the CompuServe Mall system. The claims of the ’639 patent are invalid for obviousness over Johnson in view of additional prior art, and the other evidence presented. The judgments of validity are reversed, and therefore the judgments of infringement and damages are vacated.

**REVERSED IN PART, VACATED IN PART**