

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CLOVER NETWORK, LLC,

Petitioner,

v.

CLOUDOFCHANGE, LLC,

Patent Owner.

Case IPR2023-00288

Patent 10,083,012 B2

**PATENT OWNER'S PRELIMINARY RESPONSE TO PETITION FOR
INTER PARTES REVIEW OF U.S. PATENT NO. 10,083,012**

TABLE OF CONTENTS

TABLE OF CONTENTS	i
TABLE OF AUTHORITIES.....	iii
EXHIBIT LIST	vi
I. INTRODUCTION.....	1
II. BACKGROUND.....	3
A. State of the Art	3
B. Overview of the '012 Patent	6
C. Prosecution History.....	7
D. The '012 Patent's Litigation History	8
III. LEVEL OF ORDINARY SKILL IN THE ART	9
IV. CLAIM CONSTRUCTION	12
A. "a web-based point of sale (POS) builder system".....	14
B. "communications network" (Claims 1, 14)	15
C. "POS terminal".....	16
V. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION UNDER 35 U.S.C § 314(a).....	17
A. There is a Complete Overlap between the Issues Raised in the Petition and in the Parallel Litigation (Factor 4)	19
B. The Investment of the Court and the Parties in the District Court Litigation, Addressing Identical Issues to be Decided Before the Board's Final Written Decision, Warrants Discretionary Denial Under 35 U.S.C. §314(a) (Factors 1-3, 5).....	22
1. A stay was denied (Factor 1)	23
2. A Jury Trial will conclude before any final written decision (Factor 2)	24
3. There has been and will continue to be significant investment in the parallel litigation (Factor 3)	26
4. Petitioner is the named Defendant (Factor 5).....	27
C. Merits and Other Circumstances (Factor 6).....	28
VI. PETITIONER HAS FAILED TO PROVE THE CHALLENGED CLAIMS OBVIOUS	30
A. Ground 1 – <i>Woycik</i>	30
1. Reexamination of the Jury's factual findings violate the Constitution.....	30
2. Overview of <i>Woycik</i>	31
3. Petitioner misrepresents <i>Woycik</i>	35
4. Claims 1 and 14	39

B.	Ground 2 – <i>Olson</i> and <i>Woycik</i>	46
1.	<i>Olson</i> is not prior art	46
2.	Overview of <i>Olson</i>	48
3.	Petitioner fails to show a reasonable expectation of success to modify the system of <i>Olson</i> based on the teaching of <i>Woycik</i>	51
4.	Claims 1 and 14	53
C.	Ground 3 – <i>Tengler</i>	57
1.	Overview of <i>Tengler</i>	58
2.	Claims 1 and 14	62
VII.	SECONDARY CONSIDERATIONS	67
A.	Evidence of Secondary Considerations	67
1.	There is a strong nexus between CloudofChange’s claimed invention and the evidence	68
2.	Commercial success	69
3.	Long-felt need	70
B.	Petitioner Fails to State of <i>Prima Facie</i> Case of Obviousness Because Petitioner Does Not Address Secondary Considerations (<i>Graham</i> Factor 4)	72
VIII.	CONCLUSION	75
	CERTIFICATION OF SERVICE	76
	CERTIFICATE OF COMPLIANCE	77

TABLE OF AUTHORITIES

Cases	Page(s)
<i>AC Technologies S.A. v. Amazon.com, Inc.</i> , 912 F.3d 1358 (Fed. Cir. 2019)	31
<i>Apple Inc. v. Int’l Trade Comm’n</i> , 725 F.3d 1356 (Fed. Cir. 2013)	68
<i>Apple, Inc. v. Uniloc 2017 LLC</i> , IPR2020-00854, Paper 9 (P.T.A.B. Oct. 28, 2020).....	26
<i>Arctic Cat Inc. v. GEP Power Products, Inc.</i> , 919 F.3d 1320 (Fed. Cir. 2019)	14
<i>ClassCo., Inc. v. Apple, Inc.</i> , 838 F.3d 1214 (Fed. Cir. 2016)	73
<i>Commscope Techs. LLC v. Dali Wireless, Inc.</i> , IPR2022-01242, Paper 23 (P.T.A.B. Feb. 27, 2023)	19, 25, 26, 75
<i>Deere & Co. v. Bush Hog, LLC</i> , 703 F.3d 1349 (Fed. Cir. 2012)	15
<i>Dome Patent L.P. v. Lee</i> , 799 F.3d 1372 (Fed. Cir. 2015)	68
<i>Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.</i> , 800 F.3d 1375 (Fed. Cir. 2015)	74
<i>E-One, Inc. v. Oshkosh Corp.</i> , IPR2019-00161, Paper 16 (P.T.A.B. May 15, 2019).....	25
<i>Ericsson Inc. v. Collision Communications, Inc.</i> , IPR2022-01233, Paper 12 (P.T.A.B. Jan. 19, 2023).....	25
<i>Facebook, Inc. v. Windy City Innovations, LLC</i> , 973 F.3d 1321 (Fed. Cir. 2020)	25
<i>Fox Factory, Inc. v. SRAM, LLC</i> , 944 F.3d 1366 (Fed. Cir. 2019)	68

<i>General Plastic Indus. Co., LTD. v. Canon Kabushiki Kaisha</i> , No. IPR2016-01357, Paper 19 (P.T.A.B. Sept. 6, 2017)	18
<i>Graham v. John Deere Co.</i> , 383 U.S. 1, 17-18 (1966)	73
<i>In re Abbott Diabetes Care, Inc.</i> , 696 F.3d 1142 (Fed. Cir. 2012)	9
<i>In re Huai-Hung Kao</i> , 639 F.3d 1057, (Fed. Cir. 2011)	74
<i>Intel Corp. v. VLSI Tech. LLC</i> , IPR2019-01192, Paper 15 (P.T.A.B. Jan. 9, 2020)	26
<i>KSR Int’l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007).....	73
<i>Kyocera Senco Indus. Tools v. Int’l Trade Comm’n</i> , 22 F.4th 1369 (Fed. Cir. 2022)	11
<i>Lectronsonics, Inc., v. Zaxcom, Inc.</i> , IPR2018-01129, Paper 33 (P.T.A.B. Jan. 24, 2021)	68, 69
<i>Leo Pharm. Prods., Ltd. v. Rea</i> , 726 F.3d 1346 (Fed. Cir. 2013)	68
<i>NHK Spring Co., Ltd. v. Intri-Plex Technologies, Inc.</i> , IPR2018-00752, Paper 18 (P.T.A.B. Sept. 12, 2018)	18, 24
<i>Oil States Energy Servs. LLC v. Greene’s Energy Grp., LLC</i> , 138 S. Ct. 1365 (2018).....	17
<i>PAR Pharm., Inc. v. TWI Pharm., Inc.</i> , 773 F.3d 1186 (Fed. Cir. 2014)	30
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005)	12
<i>Pitney Bowes v. Hewlett-Packard Co.</i> , 182 F.3d 1298 (Fed. Cir. 1999)	14

<i>SAS Institute Inc. v. Iancu</i> , 138 S.Ct. 1348 (2018).....	31
<i>Sotera Wireless, Inc. v. Masimo Corp.</i> , IPR2020-01019, Paper 12 (P.T.A.B. Dec. 1, 2020).....	20
<i>Speed Techs., LLC v. Lee</i> , 136 S. Ct. 2131 (2016).....	17
<i>WBIP, LLC v. Kohler Co.</i> , 829 F.3d 1317 (Fed. Cir. 2016)	69
<i>Xerox Corp. v. Bytemark, Inc.</i> , IPR2022-00624, Paper 9 (P.T.A.B. Aug. 24, 2022).....	36
Statutes	
35 U.S.C. § 102	46, 47
35 U.S.C. § 103	28, 47, 73
35 U.S.C. § 141	24
35 U.S.C. § 312	29, 74
35 U.S.C. § 314	17
35 U.S.C. § 315	25
Other Authorities	
H.R. REP. NO. 112-98, pt. 1, pp. 40, 48 (2011).....	18
P.T.A.B. Consolidated Trial Practice Guide, 58 (Nov. 2019).....	19
Regulations	
37 C.F.R. § 42.104	29, 74
Constitutional Provisions	
U.S. CONST. AMEND. VII.....	31

EXHIBIT LIST

Petitioner's Exhibits	
Exhibit	Description
1001	Baratta et al., U.S. Patent No. 10,083,012 ("the '012 patent")
1002	Expert Declaration of Dr. Todd Mowry
1003	Prosecution History File Wrapper of the '012 patent
1004	U.S. Patent Publication No. 2007/0265935 (" <i>Woycik</i> ")
1005	U.S. Patent Publication No. 2005/0049921 (" <i>Tengler</i> ")
1006	U.S. Patent Publication No. 2008/0208696 (" <i>Olson</i> ")
1007	U.S. Patent Publication No. 2004/0181454 (" <i>Manno</i> ")
1008	U.S. Patent Publication No. 2006/0235755 (" <i>Mueller</i> ")
1009	U.S. Patent Publication No. 2004/0128199 (" <i>Cusack</i> ")
1010	United Kingdom Patent Application GB2369201 (" <i>Tomlinson</i> ")
1011	U.S. Pat. No. 5,818,428 (" <i>Eisenbrandt</i> ")
1012	Plaintiff's Response in Opposition to Defendant's Motion for Summary Judgment, <i>CloudofChange, LLC v. NCR Corporation</i> , 6-19-cv-00513 (W.D. Tex.)
1013	Trial Transcript Vol. 1, <i>CloudofChange, LLC v. NCR Corporation</i> , 6-19-cv-00513 (W.D. Tex.)
1014	Plaintiff's Motion in <i>Limine</i> , <i>CloudofChange, LLC v. NCR Corporation</i> , 6-19-cv-00513 (W.D. Tex.)
1015	United States Patent and Trademark Office Patent Assignment History
1016	Patent Assignment
1017	Plaintiff's Preliminary Infringement Contentions Exhibit A2, <i>CloudofChange, LLC v. Lightspeed POS Inc.</i> , 6-21-cv-01102 (W.D. Tex.)
1018	Scheduling Order, <i>CloudofChange, LLC v. Lightspeed POS Inc.</i> , 6-21-cv-01102 (W.D. Tex.)
1019	U.S. Patent Publication No. 2002/0194074 (" <i>Jacobs</i> ")
1020	U.S. Patent No. 7,051,091 (" <i>Cohen</i> ")
1021	U.S. Patent No. 6,384,850 (" <i>McNally</i> ")
1022	U.S. Patent No. 6,002,395 (" <i>Wagner</i> ")
1023	U.S. Patent Publication No. 2007/0175992 (" <i>Brown</i> ")
1024	Final Claim Constructions of the Court, <i>CloudofChange, LLC v. NCR Corporation</i> , 6-19-cv-00513 (W.D. Tex.)
1025	Supplemental Claim Construction Order, <i>CloudofChange, LLC v. NCR Corporation</i> , 6-19-cv-00513 (W.D. Tex.)
1026	U.S. Patent No. 6,247,032 (" <i>Bernardo</i> ")

Petitioner's Exhibits	
Exhibit	Description
1027	U.S. Patent No. 9,400,640 ("the '640 patent")
1028	Microsoft Computer Dictionary (Microsoft Press 5th Ed. 2002)
1029	IEEE Dictionary (IEEE 3rd Ed. 1984)
1030	Random House Computer and Internet Dictionary (Random House 3rd Ed. 1999)
1031	H. Seth, Microsoft .NET – Kick Start (Sams Pub. 2004)
1032	R. Cattell et al., J2EE Technology in Practice (Addison-Wesley 2001)
1033	J. Allaire, Macromedia Flash MX: A Next-Generation Rich Client (Macromedia Mar. 2002)
1034	Final Claim Construction
1035	Plaintiff's Disclosure of Asserted Claims and Preliminary Infringement Contentions
1036	Scheduling Order
1037	Transcript of Feb. 3, 2023
Patent Owner's Exhibits	
Exhibit	Description
2001	Davis, Ryan, <i>Albright Says He'll Very Rarely Put Cases On Hold For PTAB</i> , Law 360 (May 11, 2021, 6:50 PM EDT), https://www.law360.com/articles/1381597/print?section=ip (last visited July 22, 2021)
2002	First Amended Scheduling Order, <i>CloudfChange, LLC v. Lightspeed POS Inc.</i> , Case No. 6:21-cv-01102, Western District of Texas, Waco Division.
2003	Petitioner Clover's Preliminary Invalidity Contentions
2004	PACER Docket Report <i>CloudfChange, LLC v. Clover Network, LLC</i>
2005	Baratta Declaration
2006	Olson Declaration
2007	Ackerman Declaration
2008	Jury Verdict - Dkt. 159
2009	Trial Transcript (Vol. 1 of 4) <i>CloudfChange, LLC v. NCR Corporation</i> , 6-19-cv-00513 (W.D. Tex.)
2010	Trial Transcript (Vol. 2 of 4) <i>CloudfChange, LLC v. NCR Corporation</i> , 6-19-cv-00513 (W.D. Tex.)
2011	Trial Transcript (Vol. 3 of 4) <i>CloudfChange, LLC v. NCR Corporation</i> , 6-19-cv-00513 (W.D. Tex.)
2012	Trial Transcript (Vol. 4 of 4) <i>CloudfChange, LLC v. NCR Corporation</i> , 6-19-cv-00513 (W.D. Tex.)

Petitioner's Exhibits	
Exhibit	Description
2013	National Judicial Caseload Profile https://www.uscourts.gov/sites/default/files/data_tables/fcms_na_distcomparison0930.2022.pdf
2014	Waco's second federal magistrate judge sworn in to help manage growing patent litigation docket https://www.kwtx.com/2022/04/01/wacos-second-federal-magistrate-judge-sworn-help-manage-growing-patent-litigation-docket/
2015	Declaration of Alex Cheng
2016	PACER Docket Report <i>CloudofChange, LLC v. Lightspeed POS Inc.</i>
2017	Jaikumar Vijayan, "TJX data breach: At 45.6M card numbers, it's the biggest ever," COMPUTERWORLD, March 29, 2007, https://www.computerworld.com/article/2544306/tjx-data-breach--at-45-6m-card-numbers--it-s-the-biggest-ever.html
2018	Kutay Kalkan, Francis Kwansa, Cihan Cobanoglu, "Payment Card Industry Data Security Standards (PCI DSS) Compliance in Restaurants," Journal of Hospitality Financial Management, Volume 13, Issue 2, March 2010, https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1188&context=jhfm
2019	Tim Wilson, Many Retailers Will Not Make PCI Compliance Deadline," Dark Reading, September 26, 2007, https://www.darkreading.com/analytics/many-retailers-will-not-make-pci-compliance-deadline
2020	Forrester Research, "Launch of Forrester's 2010 Security Survey," Forrester, April 15, 2010, https://www.forrester.com/blogs/launch-of-forresters-2010-security-survey/
2021	Final Claim Constructions of the Court, <i>CloudofChange, LLC v. Lightspeed POS Inc.</i> , 6-21-cv-01102 (W.D. Tex.) (Dkt. 48)
2022	Clover's Motion for Protective Order
2023	Lightspeed's Preliminary Invalidity Contentions
2024	Prosecution History File Wrapper of the '640 patent
2025	U.S. Patent No. 11,226,793 ("the '793 patent")
2026	Clover Motion to Stay
2027	Clover's Motion to Transfer Venue

Petitioner's Exhibits	
Exhibit	Description
2028	Director Katherine K. Vidal Memorandum (dated June 21, 2022) https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621.pdf
2029	Institution Decision, IPR2022-00997, Paper 9
2030	IPR2022-00997, Paper 7

I. INTRODUCTION

Patent Owner CloudfChange, LLC (“CloudfChange”) submits this preliminary response to the Petition filed by Clover Network, LLC (“Clover” or “Petitioner”) requesting *inter partes* review of Claims 1-20 of U.S. Patent No. 10,083,012 B2 (the “’012 Patent”).¹ Petitioner has not met its burden of proof, and CloudfChange presents the Board with facts demonstrating patentability of the Challenged Claims. For the reasons provided herein, the Board should not institute.

Petitioner challenges the patentability of the Challenged Claims based on three references: *Woycik*, *Olson*, and *Tengler*, utilized in three (3) grounds. Specifically, Petitioner asserts the following challenges to the Challenged Claims:

Ground	Basis	Claims	References
1	§103	1-20	<i>Woycik</i>
2	§103	1-20	<i>Olson</i> in view of <i>Woycik</i>
3	§103	1-20	<i>Tengler</i>

Petition, 4.

The Petition should be denied for independent reasons.

First, the Board should exercise its discretion to deny institution under 35 U.S.C. § 314(a) in view of the complete overlapping issues in the parallel district court litigation and the fact that Petitioner failed to offer any stipulation to mitigate

¹ Concurrent with the Petition, Petitioner filed a motion for joinder to IPR2022-00997 (the “997 IPR”).

concerns of the overlap. Further, the parallel district court litigation is expected to be completed before the Final Written Decision in this proceeding. Indeed, the Parties have already invested significant resources in the district court litigation, including preparing and responding to various motions and amendments, preparing infringement, invalidity, and resolving all claim construction disputes, and will soon be engaged in general fact discovery. Accordingly, the Board should deny institution to avoid inefficiency and duplication of efforts.

Second, the Petition fails to demonstrate that there is a reasonable likelihood that the petitioner would prevail as to at least one of the claims challenged. In particular, Grounds 1-3 fail because none of the prior art references teach “a “web server including POS builder software installed thereon.” EX1001, Claims 1, 14. Furthermore, Ground 2 fails because *Olson* is not prior art. Ground 3 fails because the Petition does not sufficiently demonstrate that *Tengler* teaches all of the claim elements. Indeed, the Board has already rejected the exact same substantive ground in IPR2022-00997. EX2029, 13-15.

Third, Petitioner has failed to rebut known objective indicia of nonobviousness of the '012 Patent raised in IPR2022-00997 that Petitioner seeks to join. *Here*, the objective evidence weighs in favor of nonobviousness, but the Petition fails to even address this issue. As such, the Petition is deficient, and institution should be denied.

II. BACKGROUND

A. State of the Art

In 2008, when the '012 Patent was filed, how POS content was created and implemented was important to the claimed invention. EX2015, ¶32. It remains important today. Prior to the '012 Patent, typically each POS vendor had its own proprietary set of technologies and methods in place to create, implement, and manage POS content. *Id.* POS hardware vendors' business model typically included a services division that produced revenues for the company to create this content for merchants. *Id.* Additionally, many third parties existed which charged merchants to maintain this content. *Id.* Accordingly, there were business reasons in place that provided incentives for companies to make these technologies difficult for merchants to use. *Id.* As a result, prior to the '012 Patent, point of sale (POS) systems were tethered to in-store servers and required expensive and time-consuming manual software for store and restaurant owners to make even minor changes to menu items or product offerings. Historically, “only specially trained people” could build or change these POS systems, which were still “difficult” and “prone to error” leading store owners “to retain older, inaccurate, out-of-date POS screens in order to avoid the POS screen editing process.” EX1001, 1:43-49. The patented invention, a web-based POS builder system, eliminated these challenges by providing an inexpensive and efficient method for “assist[ing] non-expert business

operators in building, editing and testing a [POS] system to manage their businesses” while simultaneously removing the requirement of purchasing and maintaining on site computer servers for POS systems. *Id.* at Abstract, 5:56-58.

“Web-based” technologies started to take hold in the mid-to-late 2000s when wide-spread adoption started taking place. EX2015, ¶33. Prior to this time, legacy technologies—mainframes and client/server technologies—were the most predominant and the legacy computing style was typically centralized and proprietary. *Id.* Most POS vendors managed POS content using a large, centralized computer with connected remote computers, all under a proprietary connection. *Id.* Outside of the POS industry, “web-based” technologies began to sever this link and allowed for open source (generally free, standardized technology stacks) as well as standardized computing languages that allowed for an expanded pool of resources and benefits for lay persons. *Id.*

In contrast to the legacy computing environment, with private, proprietary connections, the Internet (web-based) allowed for more open, more prolific, and more standardized connectivity. *Id.* at ¶34. This connectivity enabled what is now called the “Cloud.” *Id.* While “cloud” based technology is prolific in today’s computing environment, tactical application of cloud computing was in its formative stages in the mid-to-late 2000s. *Id.* The term itself had not proliferated widely, but the use of the underlying technologies for the business model of Software as a

Service (SaaS) and “Hosted” solutions were becoming common in the mid to late 2000s. *Id.* Simply put, Cloud computing is a computing style in which the actual computations or data is location agnostic.

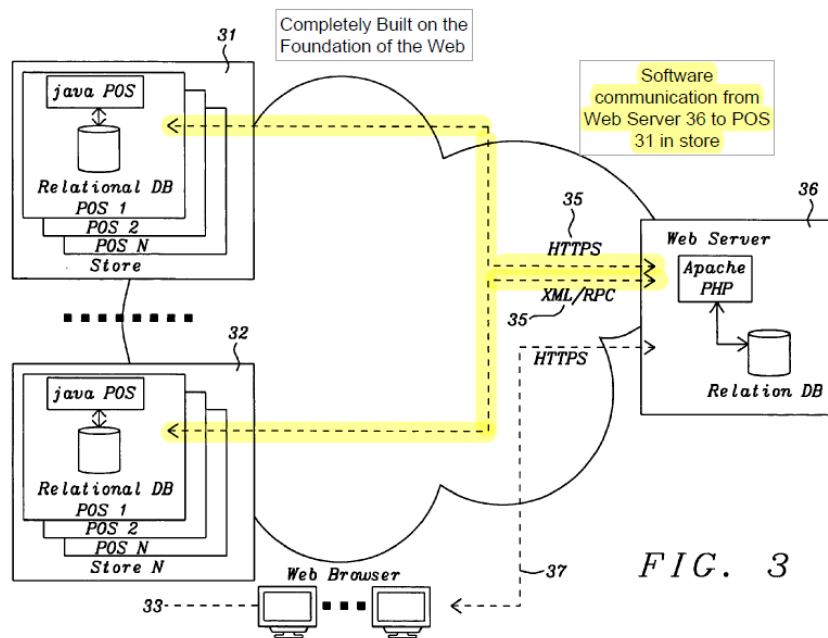
Additionally, in February 2008, developers and maintainers of POS systems were struggling to find solutions to problems related to access management, application security, and encryption. EX2015, ¶35; EX1001, 4:50-58. Access management (login and password), application security (segregated database instances), and encryption are well known requirements for web servers. EX2015, ¶35. These requirements are documented in the ’012 Patent specification to describe the web server of the Patent.

Due to data breaches, by February 2008, to maintain consumer trust in the use of credit and debit cards, the Payment Card Industry Data Security Standard (“PCI DSS”) was established. EX2015, ¶36. PCI DSS compliance by June 30, 2007 would grant safe harbor for retailers from fines of \$500,000 per breach. EX2018; EX2015, ¶36. In turn, this would require providers of POS systems and services to be PCI DSS compliant as well. Even with the motivation to avoid the risk of stiff fines, a 2007 Forrester Research survey revealed that only 60 percent of US respondents planned to be PCI DSS compliant by the end of 2008. The three largest reasons for the delay were identified as **access management, application security, and encryption**. EX2019 (emphasis added); EX2015, ¶36. These problems proved to

be so severe that, by 2010, it was reported that PCI compliance from 2007 to 2009 only rose from 46% to 51%. North American organizations are still not where they should be, and the level of PCI compliance in Europe is especially poor.” EX2020; EX2015, ¶36. Consequently, in February 2008, a POSITA would be strongly motivated away from solutions that introduce requirements for access management, application security and encryption. EX2015, ¶36.

B. Overview of the '012 Patent

The '012 Patent involves technology for systems, services, and products for POS systems to manage business operations. *Id.* at 1:20-22. The technology includes “a method for online, web-based point of sale (POS) building and configuration, which can assist non-expert business operators in assembling a point of sale system to manage their businesses” and whose operation “can range from a single branch to a large chain of stores or branches.” *Id.* at Abstract. The '012 Patent states, and illustrates in Figure 3, that “[t]he key advantages of the Web-based POS builder are that it is completely built on the foundation of the Web.” *Id.* at 5:39-40.



EX1001, Fig. 3 (annotated).

C. Prosecution History

During prosecution, *Olson* (U.S. App. No. 11/710,722) was disclosed in an Information Disclosure Statement (“IDS”) on June 27, 2017. EX1003, 168-70. On August 25, 2018, the Examiner signed and initialed the IDS confirming that the Examiner considered *Olson*. EX1003, 4.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ¹
	12	Co-pending US Patent TY06-001, Serial No. 11/710,722, File date: February 26, 2007, "Point of Sale System with Web-Based Back-Office," by Quentin Olson, 25 pgs.	
	13	Co-pending US Patent TY06-002, Serial No. 11/710,723, File date: February 26, 2007, "Point of sale Video Server Processing System," by Quentin Olson et al., 24 pgs.	
	14	Co-pending US Patent TY06-003, Serial No. 12/012,393, File date: February 1, 2008, "Hand-Held Web Browser Inventory Checking System," by Quentin Olson et al., 24 pgs.	
	15	Localsoft Tech, db2k e-Store Builder 3.00 details, 3 pgs, found 02/08/2008, http://www.soft32download.com/software/dbk-e-Store-Builder-download-details.html	
	16	IBM 4690 ASTRA – Graphical User Interface (GUI) – Specifications, 1 pg., found 02/08/2008, http://www.03.ibm.com/products/retail/products/software/gui/astra/specs.html	

26189695

12/49 08/25/18

Examiner Signature /ROKIB MASUD/	Date Considered 08/25/2018
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

T¹ - Place a check mark in this area when an English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /R.M./

D. The '012 Patent's Litigation History

Patent Owner filed suit against Petitioner for infringement of the '012 Patent in a lawsuit styled *CloudfChange, LLC v. Clover Network, Inc.*, No. 6:22-cv-00634 (W.D. Tex. Jun. 17, 2022) ("Clover Litigation"). The '012 Patent was previously involved in a lawsuit styled *CloudfChange, LLC v. NCR Corporation*, 6-19-cv-00513 (W.D. Tex. Aug. 30, 2019) ("NCR Litigation"), which resulted in a jury verdict holding that Claims 1-4 of the '012 Patent are not invalid and were infringed. EX2008, 4. The Jury in the NCR Litigation expressly rejected invalidity arguments based on *Woycik*. EX2008; EX2009, 56-57, and 100-102; EX2010, 243-300; and EX2011, 126-132, 137-139, 144-147, 152-153, 225-227, 245-246, and 254. Patent Owner has also filed suit against Lightspeed, POS Inc., asserting the '012 Patent.

CloudofChange, LLC v. Lightspeed POS Inc., 6:21-cv-01102 (W.D. Tex. Oct. 22, 2021).

III. LEVEL OF ORDINARY SKILL IN THE ART

The definition of a hypothetical “person of ordinary skill in the art” (“POSITA”) is relevant to issues of claim construction, anticipation, and obviousness. *In re Abbott Diabetes Care, Inc.*, 696 F.3d 1142, 1149 (Fed. Cir. 2012).

Petitioner proposes that a POSITA at the Critical Date, would have had a **working knowledge of designing and developing web-based software and systems**. A POSITA would have had a Bachelor of Science in computer science or a related field, and approximately **two years of professional experience or equivalent study in the design and development of web-based software and systems, including web-based POS systems**. Additional graduate education could substitute for professional experience, or significant experience in the field could substitute for formal education.

Petition, 8 (citing EX1002, ¶17) (emphasis added).

In contrast, Patent Owner proposes that a POSITA in the field of the ’012 Patent at the time of the effective filing date of the ’012 Patent would have a Bachelor of Science in computer science or a related field, and approximately two years of professional experience or equivalent study in the design and development of retail POS systems, including experience with building POS screens. EX2015, ¶¶28-31. Additional graduate education could substitute for professional

experience, or significant experience in the field could substitute for formal education. *Id* at 28.

By contrast, Petitioner’s proposed definition does not require any experience with retail POS systems—let alone **building POS screens**—that are the field of the ’012 Patent. Instead, Petitioner proposes a definition that references **“approximately two years of professional experience** or equivalent study in the **design and development of web-based systems, including web-based POS systems.**” Petition, 8 (emphasis added). Petitioner’s proposed definition makes experience in retail POS systems optional. So, a POSITA could have general professional experience in web-based software, yet no experience with the technology, state of the art, and problems particular to the entire field of POS systems at the time of the effective filing date of the ’012 Patent. EX1002, Appendix A, 158-171. Patent Owner’s proposed definition of a POSITA remedies this deficiency by including experience or equivalent study in the field of the ’012 Patent, retail POS systems, including experience with building POS screens.

Additionally, Petitioner has provided a declaration of Dr. Todd Mowry (EX1002). Dr. Mowry’s basis for a POSITA is merely his academic experience, which does not include “design and development of web-based software and systems, including web-based POS systems” let alone **“two years of professional experience or equivalent study in the design and development of retail POS**

systems, including experience with building POS screens.” EX1002, ¶¶2-8 and

Appendix A. Indeed, neither Petitioner nor Petitioner’s Declarant, Dr. Mowry, offer

any experience with: (i) two years of professional experience or equivalent study

in the design and development of web-based software and systems, including

web-based POS systems,² or (ii) two years of professional experience or

equivalent study in the design and development of retail POS systems, including

experience with building POS screens. EX1002, ¶¶2-8 and Appendix A.

Therefore, under a proper definition of a POSITA that includes experience or

additional study in the field of web-based POS builder software and systems, or even

Dr. Mowry’s definition of a POSITA, Dr. Mowry is not a POSITA with reference

to the ’012 Patent. *Id.* “To offer expert testimony from the perspective of a skilled

artisan in a patent case—like for claim construction, validity, or infringement—a

witness must at least have ordinary skill in the art.” *Kyocera Senco Indus. Tools v.*

Int’l Trade Comm’n, 22 F.4th 1369, 1376-77 (Fed. Cir. 2022). Testimony of an

expert that fails to meet the definition a POSITA should be excluded. *Id.* at 1377-

78 (holding that the administrative law judge abused their discretion by admitting

the testimony of an expert that lacked experience required by the adopted definition

of a POSITA). EX2015, ¶31. The Board should exclude Dr. Mowry testimony.

² Indeed, Dr. Mowry’s resume does not refer to web-based POS systems, let alone “point of sale systems.” EX1002, Appendix A.

IV. CLAIM CONSTRUCTION

Claim terms should be given their “ordinary and customary meaning” as understood by a POSITA in question at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). CludofChange disputes Petitioner’s assertion that “[p]rior *Markman* orders do not impact the Petition’s grounds.” Petition, 9 n.3 (citing EX1024, EX1025). CludofChange disputes Petitioner’s assertion that “[p]rior *Markman* orders do not impact the Petition’s grounds.” Petition, 9 n.3 (citing EX1024, EX1025, EX1034, EX1002, ¶29).

In related litigations, the Western District of Texas (WDTX) construed the terms, as follows:

Claim Term	Court’s Construction in the Lightspeed Litigation EX2021	Court’s Construction in the NCR Litigation EX1024; EX1025
“terminal device”	Plain and ordinary meaning	--
“web-based point of sale (POS) builder system”	--	“a point of sale (POS) builder system that requires the internet”
“point of sale terminal[s]”	Plain and ordinary meaning	Plain and ordinary meaning
“a web server”	--	“hardware and software that uses HTTP (hypertext transfer protocol) to serve data or files that form web pages” Under the Court’s construction, HTTP includes the insecure and secure versions of HTTP, <i>i.e.</i> , HTTP and HTTPS.

Claim Term	Court’s Construction in the Lightspeed Litigation EX2021	Court’s Construction in the NCR Litigation EX1024; EX1025
“point of sale builder software”	Plain and ordinary meaning, wherein plain and ordinary meaning means “software that builds the POS terminals”	Plain and ordinary meaning, wherein plain and ordinary meaning means “software that builds the POS terminals”
“programmatically creating or modifying said one or more POS terminals in real time”	--	Plain and ordinary meaning
“generated by said POS builder software”	--	Plain and ordinary meaning
“POS builder interface”	--	Plain and ordinary meaning, wherein plain and ordinary meaning means “an interface to the POS builder software”
“configured to be utilized to access said POS builder software for programmatically creating or modifying said one or more POS terminals in real time”	--	Plain and ordinary meaning

CloudofChange proposes that the PTAB adopt Judge Albright’s constructions in the Lightspeed Litigation and final constructions in the NCR Litigation. Consistent with Judge Albright’s construction, CloudofChange proposes that the preamble of independent Claims 1 and 14 are limiting. Petitioner has only proposed

construction of the claim term “communications network” in this proceeding. Petition, 9-10. However, in a footnote, Petitioner argues that “POS terminal” in the ’012 claims means “something ‘generated by POS builder software’ and ‘accessible at one or more terminal devices’ (e.g., the terminal device’s POS software and related interface configuration data), not the terminal device.” Petition, 9 n.4. Each is addressed below.

A. “a web-based point of sale (POS) builder system”

The preamble of both Claims 1 and 14 recites “a web-based point of sale (POS) builder system.” The Federal Circuit recently reaffirmed that, “[i]n general, a preamble limits the invention if it recites essential structure or steps, or if it is necessary to give life, meaning, and vitality’ to the claim.” *Arctic Cat Inc. v. GEP Power Products, Inc.*, 919 F.3d 1320, 1327 (Fed. Cir. 2019) (internal quotations omitted). The WDTX correctly construed the preamble as “a point of sale (POS) builder system **that requires the internet.**” EX1024, 1 (emphasis added).

The preamble is necessary in the body of Claims 1 and 14. Where the body of a claim uses terms of the preamble for antecedent support, the preamble may limit the claims. *Pitney Bowes v. Hewlett-Packard Co.*, 182 F.3d 1298, 1306 (Fed. Cir. 1999). Here, the body of Claim 1 recites “**the** web-based point of sale (POS) builder system,” with antecedent in the preamble. EX1001, 6:42-47. Claim 14 recites a nearly identical element. *Id.* at 8:9-14.

Additionally, the “web-based” nature of the POS builder system is indicated as important by the specification. *See* Section II.B; EX2015, ¶¶50-53. “[W]hen reciting additional structure ... underscored as important by the specification, the preamble may operate as a claim limitation.” *Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1357-58 (Fed. Cir. 2012) (quotations omitted). The ’012 Patent states: **“this invention relates to an online, web-based** point of sale builder method....” EX1001, 1:24-25 (emphasis added). “The **key advantages** of the Web-based POS builder are that it is **completely built on the foundation of the Web.**” *Id.* at 5:39-40 (emphasis added).

As such, the preambles of Claims 1 and 14 are limiting, and “a web-based point of sale (POS) builder system” is properly construed as “a point of sale (POS) builder system that requires the internet.”

B. “communications network” (Claims 1, 14)

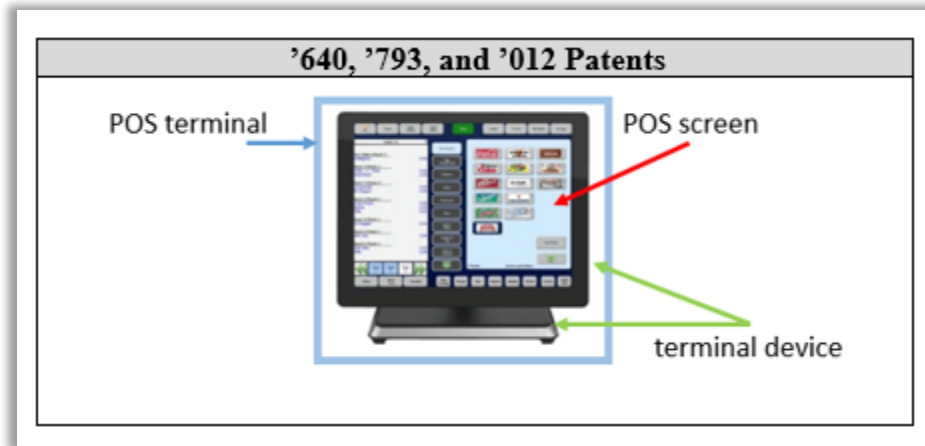
Petitioner argues that the term “communications network” “should be given its ordinary meaning—*i.e.*, a group of devices interconnected by communication channels” and should not be limited to a particular protocol. Petition, 9-10. While CloudofChange believes that no construction is necessary beyond the plain and ordinary meaning, CloudofChange does not dispute Petitioner’s construction at this stage in the proceeding. CloudofChange reserves the right to address claim construction, in the unlikely event that trial is instituted.

C. “POS terminal”

In a footnote, Petitioner seems to argue that term “POS terminal” used in the ’012 Patent has a different meaning than “POS terminal” used in the ’640 Patent. Petition, 9 n.4. This is not the case.

Indeed, these terms mean just what the plain language says, namely point of sale terminals. While CloudfChange believes that no construction is necessary beyond the plain and ordinary meaning, CloudfChange disputes Petitioner’s “context” for describing what the term “POS terminal” means in reference to the ’012 Patent claims and the ’640 Patent claims. CloudfChange further reserves the right to address claim construction, in the unlikely event that trial is instituted.

Rather than POS modifying terminal, “terminal” modifies “device” in the term “terminal device” in Claim 1 of the ’012 Patent, the “device” in “terminal device” is the hardware portion of the “POS terminal.” This is consistent with the WDTX construction in the NCR Litigation. The Court construed “point of sale terminals” used in Claims 1-4 and 6-10 of the ’012 Patent and Claims 1, 2, 4 of the ’640 Patent to have the same plain and ordinary meaning. EX1024; EX1025.



Petitioner argues that the terms have different meaning, ignoring the claim language in each of the Asserted Patents that is consistently used throughout and defined in the specification. Indeed, the '640 Patent claims do not claim a “terminal device.” Therefore, the term “POS terminals” should have the plain and ordinary meaning which includes, at least, the hardware and software portion of the POS terminal. EX2015, ¶¶55-57.

V. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION UNDER 35 U.S.C § 314(a)

The Board has discretion to decline to institute any IPR proceeding. *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (citing 35 U.S.C. § 314(a): “[a] decision to deny a petition is a matter committed to the Patent Office’s discretion”); 35 U.S.C. § 314(a); *Oil States Energy Servs. LLC v. Greene’s Energy Grp., LLC*, 138 S. Ct. 1365, 1371 (2018) (“The decision whether to institute [IPR] is committed to the Director’s discretion.”). The Board should do so here.

The Board’s discretion should be exercised if institution would be counter to the goals of the America Invents Act (AIA)—“to establish a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation costs,” and to “provide[] quick and cost effective alternatives to litigation.” H.R. REP. NO. 112-98, pt. 1, pp. 40, 48 (2011); *General Plastic Indus. Co., LTD. v. Canon Kabushiki Kaisha*, No. IPR2016-01357, Paper 19, 16-17 (P.T.A.B. Sept. 6, 2017). The Board has declined to institute in cases where a parallel district court trial would determine the same issues before the requested Board trial, rendering the review cumulative and inefficient. *NHK Spring Co., Ltd. v. Intri-Plex Technologies, Inc.*, IPR2018-00752, Paper 18, 19-20 (P.T.A.B. Sept. 12, 2018) (precedential) (quoting *General Plastic*, IPR2016-01357, Paper 19, 16-17 (precedential)); *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11, 12 (P.T.A.B. Mar. 20, 2020) (precedential).

Further, the Director of the USPTO issued a Memorandum, dated June 21, 2022, on the “Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation.” The Director recently clarified that “[t]he Board should first assess *Fintiv* Factors 1–5; if that analysis supports discretionary denial, the Board should engage the compelling merits question” of

Fintiv Factor 6.³ *Commscope Techs. LLC v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23, 4-6 (P.T.A.B. Feb. 27, 2023) (designated precedential on Feb. 10, 2023). Under *Commscope*, “the Board must provide reasoning to explain and support its determination” that compelling merits exist. *Id.* at 5-6. Moreover, “the compelling merits standard is a higher standard than the standard for institution set by statute,” and “the lower institution standard is insufficient to demonstrate that the Petition presents a compelling unpatentability challenge.” *Id.* at 3, 5.

Here, the factors weigh overwhelmingly in support of discretionary denial. Accordingly, the Board should exercise discretion to deny institution so that the cumulative issues Petitioners have raised in both the district court and the Petition can be decided efficiently, with the least amount of duplication and at the next available opportunity under the facts and circumstances here: in the district court.

A. There is a Complete Overlap between the Issues Raised in the Petition and in the Parallel Litigation (Factor 4)

Factor 4 favors denial because there is a complete overlap between the issues raised in the Petition and the parallel Clover Litigation. The fact that: (i) Petitioner

³ The Board bases its discretionary decision whether to institute or deny institution under § 314(a) on “a balanced assessment of all relevant circumstances in the case, including the merits” and “events in other proceedings related to the same patent, either at the Office, in district courts, or the ITC.” P.T.A.B. Consolidated Trial Practice Guide, 58 (Nov. 2019).

failed to offer any stipulation to mitigate concerns of overlap, and (ii) the petition “includes the same or substantially the same claims, grounds, arguments, and evidence as presented in the parallel proceeding” favors denial. *Fintiv*, Paper 11 at 12. All of the issues raised in the Petition are already presented, and are already being litigated, between the same Parties in the United States District Court for the Western District of Texas in Case No. 6:22-cv-00634.⁴ Factor 4 favors discretionary denial, as detailed below, because (i) Petitioner did not consent to a *Sotera* stipulation (or any stipulation), and (ii) this proceeding involves a complete overlap of the substantive issues to be decided in the parallel district court case.

Here, contrary to the controlling case law and Director Vidal’s guidance, Clover did not offer any stipulation to mitigate concerns of potentially conflicting decisions and duplicative efforts between the district court and the PTAB.⁵ *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 (P.T.A.B. Dec. 1, 2020); EX2029 (“Consistent with *Sotera Wireless, Inc.*, ... the PTAB will not discretionarily deny institution in view of parallel district court litigation where a

⁴ A jury has already determined that Claims 1-4 and 9 of the ’012 Patent are not invalid over *Woycik* under 35 U.S.C. § 103. EX2008, 6; EX2009, 56-57, 100-102; EX2010, 243-300; EX2011, 126-132, 137-139, 144-147, 152-153, 225-227, 245-246, and 254.

⁵ Further, when given a chance to offer a stipulation, Petitioner declined. EX1037, 19:4-21:5.

petitioner presents a stipulation not to pursue in a parallel proceeding the same grounds or any grounds that could have reasonably been raised before the PTAB.”) (emphasis omitted) (citations and footnote omitted)).

Furthermore, Petitioner’s challenges to the ’012 Patent are substantially the same as the invalidity challenges presented in the parallel litigation because Petitioner relies on substantially the same invalidity arguments relying on the same references for each independent claim. EX2003.

Petition	Preliminary Invalidity Contentions
<i>Manno</i> (EX1004)	EX2003, 12 EX2028, 5
<i>Woycik</i> (EX1005)	EX2003, 12 EX2028, 5
<i>Olson</i> (EX1006)	EX2003, 12 EX2028, 5
<i>Cusack</i> (EX1007)	EX2003, 12 EX2028, 5
<i>Tomlinson</i> (EX1008)	EX2003, 14 EX2028, 7
<i>Eisenbrandt</i> (EX1009)	EX2003, 14 EX2028, 7
<i>Mueller</i> (EX1010)	EX2003, 14 EX2028, 7
<i>Jacobs</i> (EX1018)	EX2003, 14 EX2028, 7
<i>Cohen</i> (EX1019)	EX2003, 14 EX2028, 7
<i>McNally</i> (EX1020)	EX2003, 14 EX2028, 7
<i>Wagner</i> (EX1021)	EX2003, 14 EX2028, 7

Petition	Preliminary Invalidity Contentions
<i>Tengler</i> (EX1022)	EX2003, 12 EX2028, 5
<i>Brown</i> (EX1023)	EX2003, 12, 14 EX2028, 5, 7
<i>Bernardo</i> (EX1026)	EX2003, 14 EX2028, 7
<i>Richter</i> (EX1027)	EX2003, 14 EX2028, 7
<i>Michaud</i> (EX1029)	EX2003, 12 EX2028, 5

Therefore, due to: (i) Petitioner’s lack of stipulation, and (ii) the fact that the prior art cited in each Ground in the Petition overlap invalidity theories put forth in the Clover Litigation, including *Woycik* (Grounds 1, 2), *Olson* (Ground 2), and *Tengler* (Ground 3), Factor 4 favors denial.

Thus, without **any** stipulation in this Proceeding to mitigate concerns of overlap, Factor 4 strongly favors discretionary denial.

B. The Investment of the Court and the Parties in the District Court Litigation, Addressing Identical Issues to be Decided Before the Board’s Final Written Decision, Warrants Discretionary Denial Under 35 U.S.C. §314(a) (Factors 1-3, 5)

First, this proceeding involves facts that strongly support discretionary denial. There is no stay, and thus nothing to “allay[] concerns about inefficiency and duplication of efforts.” *Fintiv*, Paper 11 at 6; EX2027 (denying a stay). This proceeding and the parallel district court litigation overlap on the substantive issues to be decided—both with respect to Petitioners’ invalidity arguments and proposed

claim construction. A jury trial is set for April 22, 2024 and will be completed before the statutory date for a final written decision in this proceeding (June 13, 2024). EX2004, 5 (entering Scheduling Order setting trial date for April 22, 2024). The court and the Parties' investment in the parallel proceeding is substantial—the district court held *Markman* hearing and issued its claim construction ruling, general fact discovery will have closed, and expert discovery will be almost complete before the statutory date for an institution decision here. *Id.* at 2-4.

1. A stay was denied (Factor 1)

This Factor weighs in favor of discretionary denial. *Fintiv*, IPR2020-00019, Paper 11, 6-9.

Here, since filing the Petition⁶, Petitioner requested a stay of the underlying litigation based on Institution of IPRs in the Lightspeed Litigation⁷ as well as this Petition and Petitioner's Motions for Joinder for each respective IPR. EX2001. However, Petitioner's Motion to Stay the underlying litigation was denied. EX2004, Dkt 48. Therefore, this Factor weighs in favor of denying institution.

⁶ Petitioner has filed petitions seeking review of the three asserted patents at issue in the WDTX litigation. *See* IPR2023-00232 ('640 Patent); IPR2023-00288 ('012 Patent) (present case); IPR2023-00287 ('793 Patent).

⁷ IPR2022-00779 ('640 Patent), IPR2022-00997 ('012 Patent), IPR2022-01143 ('793 Patent).

2. A Jury Trial will conclude before any final written decision (Factor 2)

At best, this Factor is neutral. This Factor favors denial because the parallel litigation will reach a final decision before a final written decision is issued in the IPR, if instituted. The Board will often exercise its direction to deny institution where a parallel proceeding, covering the same issues, will reach a decision prior to the Board's projected final written decision date. *NHK Spring*, IPR2018-00752, Paper 8 at 19-20.

Here, the district court issued an Order setting the jury trial for April 22, 2024. EX1036.⁸ Clover (the Petitioner in this IPR) is raising the same validity issues that are raised in the Petition. EX1032. Thus, the jury trial is scheduled to end before the statutory deadline for a final written decision because a final written decision would not be expected to issue until June 13, 2024. 35 U.S.C. § 141(c). The Board has found this Factor to favor denial under the same or similar circumstances. *Fintiv*, IPR2020-0019, Paper 11 at 13 (“[i]f the court’s trial date is earlier than the projected statutory deadline, the Board generally has weighed this fact in favor of exercising authority to deny institution”); *E-One, Inc. v. Oshkosh Corp.*, IPR2019-00161, Paper

⁸ Although the WDTX median time from filing to trial in civil cases is 28.9 months (as of September 30, 2022) this time will likely decrease with the addition of a magistrate judge for the WDTX Waco Division on April 1, 2022. *See* EX2013; EX2014.

16, 6 (P.T.A.B. May 15, 2019) (denying institution where trial was scheduled to start one month before the expected final written decision); *Ericsson Inc. v. Collision Communications, Inc.*, IPR2022-01233, Paper 12, 13 (P.T.A.B. Jan. 19, 2023) (Factor weighs in favor of denying institution because a final written decision would issue several months after the jury trial). Therefore, Factor 2 favors denial because the jury trial is scheduled to start about two (2) months before a Final Written Decision.

Clover has also filed a Motion for Joinder seeking to join IPR2022-00997. However, pursuant to the Director Vidal's guidance, the *Fintiv* Factors 1-5 must be considered prior to assessment of the "compelling merits" standard. *Commscope Techs. LLC, v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23, 4-5 (P.T.A.B. Feb. 27, 2023) (designated precedential on Feb. 10, 2023). Petitioner improperly attempts to rely on a date for the final written decision of November 10, 2023, assuming that its pending Motion for Joinder is successful. However, the joinder provision states: "If the Director institutes an *inter partes* review, the Director in his or her discretion, may join" 35 U.S.C. § 315(c) (emphasis added). That is, the Petition must be instituted on its own merits, and only then may joinder be considered. *Facebook, Inc. v. Windy City Innovations, LLC*, 973 F.3d 1321, 1323 (Fed. Cir. 2020) (the time bar exception of the joinder provision of § 315(c) "only applies if there is an instituted IPR"); *Apple, Inc. v. Uniloc 2017 LLC*, IPR2020-00854, Paper 9, 5

(P.T.A.B. Oct. 28, 2020) (precedential) (“the discretion of the Director to join a party to an ongoing IPR is premised on the Director’s determination that the petition warrants institution”). As the Director recently reaffirmed, *Fintiv* Factors 1-5 are analyzed first. *Commscope*, IPR2022-01242, Paper 23 at 4-6. The proper reference date of the final written decision for *Fintiv* Factor 2 corresponds to the present Petition, not an already-instituted IPR, and is thus June 13, 2024.

Therefore, Factor 2 favors denial.

3. There has been and will continue to be significant investment in the parallel litigation (Factor 3)

Factor 3 weighs in favor of discretionary denial because substantial resources have already been expended in the district court case, and will continue to be expended. Further, instituting this Petition would be inefficient and waste the investment made by the Parties and the district court in the parallel litigation. *Fintiv*, IPR2020-00019, Paper 11 at 9 (considering the amount and type of work already completed in the parallel litigation by the court and the Parties at the time of the institution decision); *Intel Corp. v. VLSI Tech. LLC*, IPR2019-01192, Paper 15, 11 (P.T.A.B. Jan. 9, 2020) (“When considering the impact of parallel litigation in a decision to institute, the Board seeks ... to minimize the duplication of work by two tribunals to resolve the same issue.”).

Here, the district court has already issued four (4) substantive orders related to the '012 Patent. For example, the district court has: (i) cancelled the claim

construction hearing in view of resolution of all claim construction disputes between the parties; (ii) denied Clover's motion to stay; (iii) denied in-part Clover's Motion for a Protective Order; and (iv) denied Clover's discovery request. Further, the Parties have engaged in venue-related discovery that included deposing a Clover representative. Additionally, the Parties have exchanged detailed infringement and invalidity contentions. *See, e.g.*, EX2003; EX2028. For example, Petitioner has served preliminary invalidity contentions raising substantially the same issues, evidence, and arguments as in the Petition (*i.e.*, a duplication of what has been and will continue to be litigated in the parallel litigation). *Compare* Paper 1 *with* EX2028.

Furthermore, general fact discovery will have commenced and the Parties have filed numerous motions and responses in the parallel litigation. EX1027; EX2006. Therefore, by the statutory deadline for institution, the district court will have already expended substantial resources to gain familiarity with the patent, the patent claims, and the file history.

Thus, Factor 3 favors denial.

4. Petitioner is the named Defendant (Factor 5)

Petitioner is the name defendant in the parallel Clover Litigation. Therefore, Factor 5 weighs in favor of denying institution. *Fintiv*, Paper 11, 13-14.

C. Merits and Other Circumstances (Factor 6)

As discussed above, each of Factors 1-5 favors discretionary denial, and an analysis under Factor 6 does not support a determination that the higher “compelling merits” standard favors institution. *Commscope*, IPR2022-01242, Paper 23, at 3-6. Indeed, contrary to Petitioner’s assertions, the merits of the grounds are exceptionally weak.

First, as discussed below, CloudofChange has shown above that at least one reference (*Olson*) is not prior art and the corresponding ground must fail as a matter of law. Thus, for Ground 2, where Petitioner relies on *Olson*, CloudofChange has clearly shown that the prior art fails to render obvious any of the claims of the ’012 Patent.

Second, for Ground 3, the Board has already rejected the exact same substantive ground in IPR2022-00997. Indeed, CloudofChange has already shown that the so-called “copycat” Petition does not sufficiently demonstrate that *Tengler’s* manager GUI interfaces 192 and 196 are used to access the user interface designer 614. EX2029, 13-15. Therefore, Petitioner’s Ground 3 is deficient.

Third, as discussed below, CloudofChange has shown that a jury has already determined that Claims 1-4, and 9 of the ’012 Patent are not invalid over *Woycik* under 35 U.S.C. § 103. Thus, the Seventh Amended to the United States Constitution prohibiting re-examination of the facts tried by a jury—in particular,

whether certain claims of the '012 Patent are invalid in view of *Woycik*—is a circumstance warranting the exercise of discretion under Section 314(a).

Fourth, the Petition is also deficient for failing to address known evidence of secondary considerations that were expressly raised by CloudfChange in IPR2022-00997, the matter Petitioner is seeking to join. Unlike the Petitioner in IPR2022-00997, Petitioner Clover had notice and should have been aware of evidence of secondary considerations expressly raised by CloudfChange in IPR2022-00997. Therefore, Petitioner's Petition is deficient for failing address secondary considerations, at all. *See* Paper 1, *passim* (silent on “secondary,” “evidence,” or even “indicia”). Indeed, the law is clear that even if the evidence is non-dispositive, Petitioner needed to address known evidence of secondary considerations that CloudfChange expressly raised in IPR2022-00997, the matter that Petitioner is seeking to join. EX2030. Once a petition is deficient, it is always deficient. 35 U.S.C. § 312(a)(3); 37 C.F.R. § 42.104(b). Therefore, institution should be denied under the higher “compelling merits” standard.

Fifth, as discussed below in detail, Petitioner's arguments lack merit. As discussed below, Petitioner fails to show that *Woycik*, *Olson*, and *Tengler* teach “a web server including POS builder software installed thereon.” Therefore, institution should be denied.

VI. PETITIONER HAS FAILED TO PROVE THE CHALLENGED CLAIMS OBVIOUS

To establish obviousness, Petitioner must show a “skilled artisan would have had reason to combine the teaching of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success from doing so.” *PAR Pharm., Inc. v. TWI Pharm., Inc.*, 773 F.3d 1186, 1193 (Fed. Cir. 2014) (citations omitted).

A. Ground 1 – *Woycik*

As an initial matter, Ground 1 fails because a jury has previously found the '012 Patent not invalid based on *Woycik*. Moreover, Ground 1 also fails because the Petition fails to demonstrate that *Woycik* discloses a “**web-based point of sale (POS) builder system**,” “a **web server including POS builder software** installed thereon” and “a POS builder interface configured to be accessible via network communication with said web server over a communications network” EX1001, Claim 1 (emphasis added). Also, the Petition fails to demonstrate that *Woycik* discloses features recited in Claims 2-20. Further, Petitioner fails to show that the purported knowledge of a POSITA cures these deficiencies.

1. Reexamination of the Jury’s factual findings violate the Constitution

The '012 Patent has been litigated and found by a jury to be not invalid, specifically over obviousness arguments based on *Woycik*. EX2009, 56-57, 100-102; EX2010, 243-300; EX2011, 126-132, 137-139, 144-147, 152-153, 225-227,

245-246, and 254. Indeed, a jury has determined that Claims 1-4, and 9 of the '012 Patent are not invalid over *Woycik*. EX2008, 6. Pursuant to Ground 1, obviousness under §103 based on *Woycik*, Petitioner seeks to reexamine this fact tried by a jury, raising a Constitutional issue. U.S. CONST. AMEND. VII (“In Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.”).

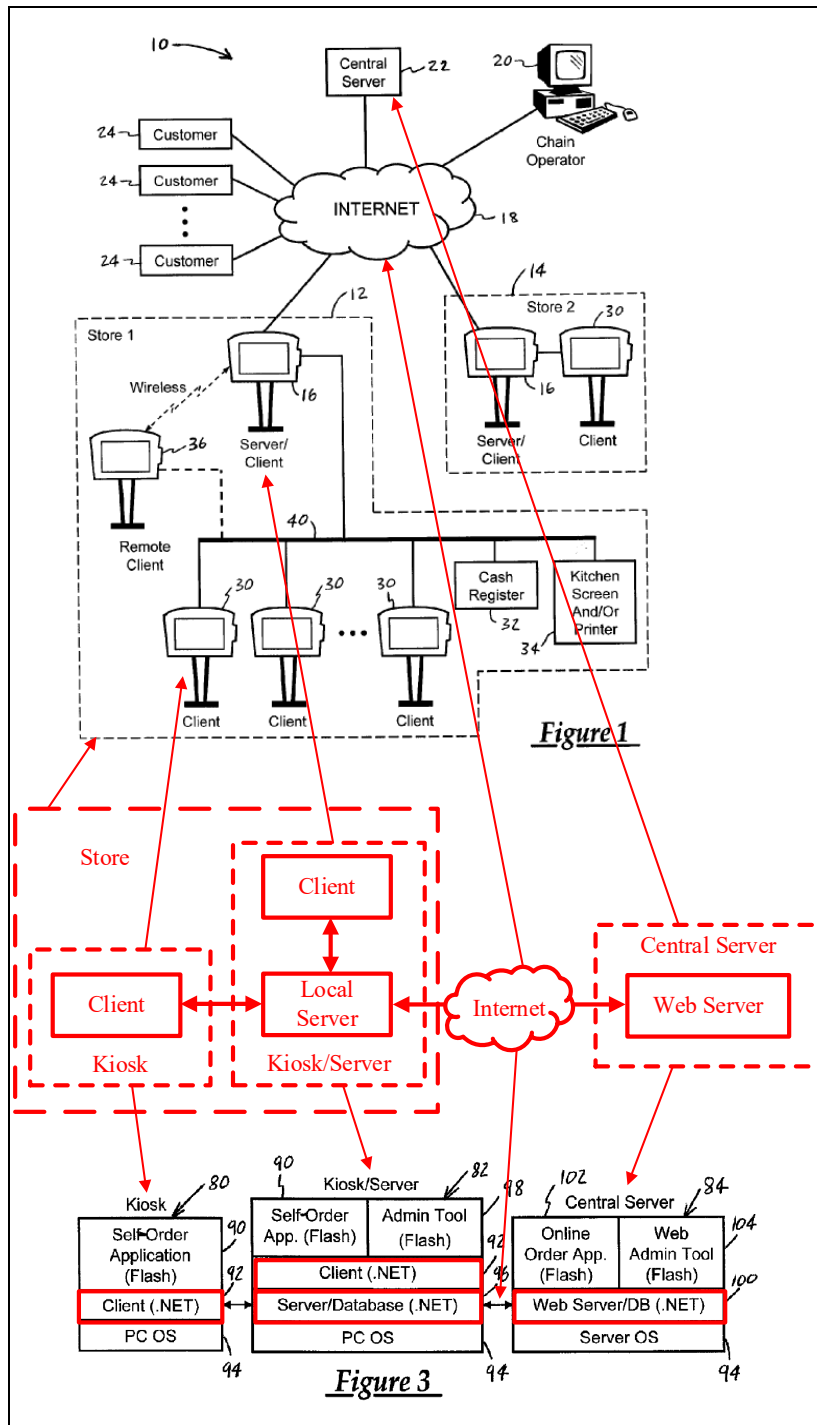
Precedent mandates that the Board consider all grounds of unpatentability raised in an instituted petition. *AC Technologies S.A. v. Amazon.com, Inc.*, 912 F.3d 1358 (Fed. Cir. 2019); *SAS Institute Inc. v. Iancu*, 138 S.Ct. 1348 (2018). Because the Board has instituted based on Ground 1, the Board will reexamine a fact determined by a jury in the NCR Litigation. Such reexamination violates the Seventh Amendment. Ground 1 must fail for this Constitutional reason. Regardless, Petitioner fails to even identify any deficiency or error in the jury’s verdict. Petition, *passim*.

2. Overview of *Woycik*

Woycik discloses a “computer-based ordering system for ordering goods and services.” EX1004, Abstract; EX2015, ¶51. A “self-service ordering system 10 constructed in accordance with the invention” includes store locations “each having

a plurality of kiosks arranged in a client-server configuration.” EX1004, [0071]; EX2015, ¶51. In addition to standalone kiosks, each store includes **a local server that is on-site**, and may be a standalone server or a joint server/kiosk. EX1004, [0071] (“In general, a single store location will include at least one local server 16 and at least one client kiosk 30.”); EX2015, ¶51. In other words, *Woycik* teaches an on-premises server requirements and does not contain a system hosted over the Internet. EX2015, ¶51. Such kiosks may be used by customers to order food that is available at the store location using a self-order application. EX1004, [0072]; EX2015, ¶51. *Woycik* expressly identifies the local server as an “advantage”: “The local server kiosk ... An **advantage** of this approach is that it enables administrators and store owners to make changes to the store offerings and customer interface without requiring any knowledge of the underlying code.” *Id.* at [0095] (emphasis added). The kiosks and local servers can communicate via a local area network. *Id.* at [0074]; EX2015, ¶51. In contrast, the POS is disclosed as connected to the Internet, but only for credit card payments. EX1004, [0074]

An annotated version of Figures 1 and 3 of *Woycik* follows:



EX1004, Figs. 1 and 3 (annotated).

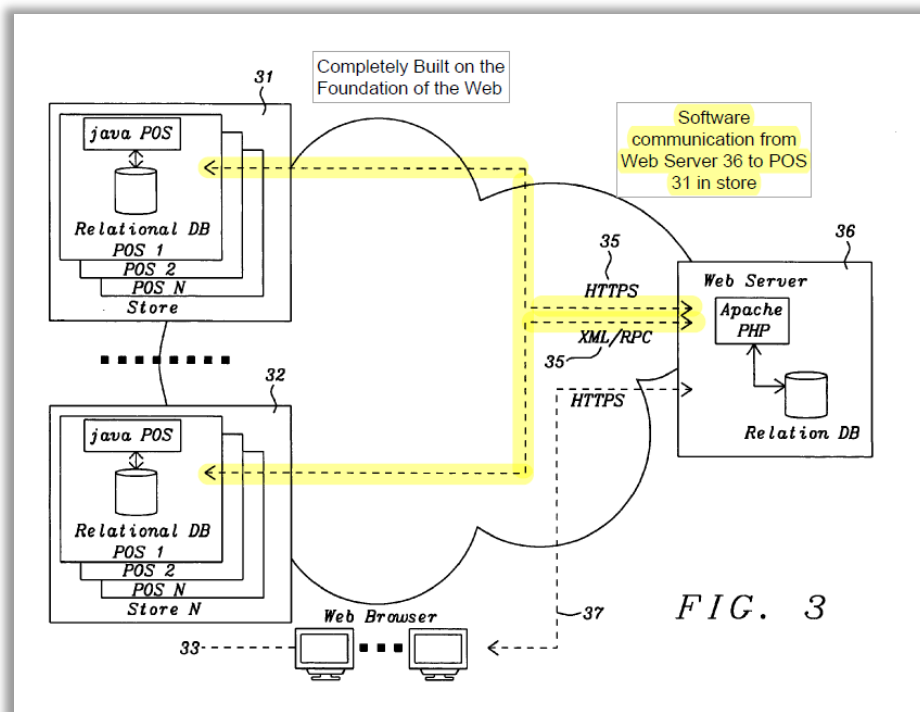
In addition to the self-order application, *Woycik* discloses an administrative tool that can be installed to run locally on a server kiosk that is in the store, or

remotely to access the local version of the administrative tool installed in-store on the server kiosk. EX1004, [0073], [0095]; EX2015, ¶53. The administrative tool can “perform various administrative functions such as configuring kiosks, creating and editing menus and available food items, and specifying tax and payment features of the system.” EX1004, [0073]. The administrative tool “**provides an administrative user interface to the client program**” and can be run from a local client “**by loading the administrative tool on each client computer 30.**” EX1004, [0073] (emphasis added); EX2015, ¶53.

In addition to running on the server kiosks, the administrative tool may be loaded on remote computers to administer and update the in-store servers. EX1004, [0075] (“Remote access also allows the chain operator **20** to **remotely run** the administrative tool” (emphasis added).); EX2015, ¶54. *Woycik* notes that this remote access of the in-store servers “can be done several ways,” including via loading the tool on a remote computer to “update the local server **16**,” loading the tool on a central server that “accesses and stores updated configuration information on the local server **16**,” or using a “web interface to the administrative tool on the local server **16**.” EX1004, [0075]; EX2015, ¶54. In each different version of the administrative tool, the tool is used to update the configuration information at the in-store server 16. *Id.*

3. Petitioner misrepresents *Woycik*

Petitioner misconstrues *Woycik* to avoid the novel and nonobvious features of the claimed invention. Indeed, the claimed technology includes “a method for online, web-based point of sale (POS) building and configuration, which can assist non-expert business operators in building, editing and testing a point of sale system to manage their businesses” that can “range from a single branch to a large chain of stores or branches.” EX1001, Abstract. “The key advantages of the Web-based POS builder are that it is completely built on the foundation of the Web.” *Id.*

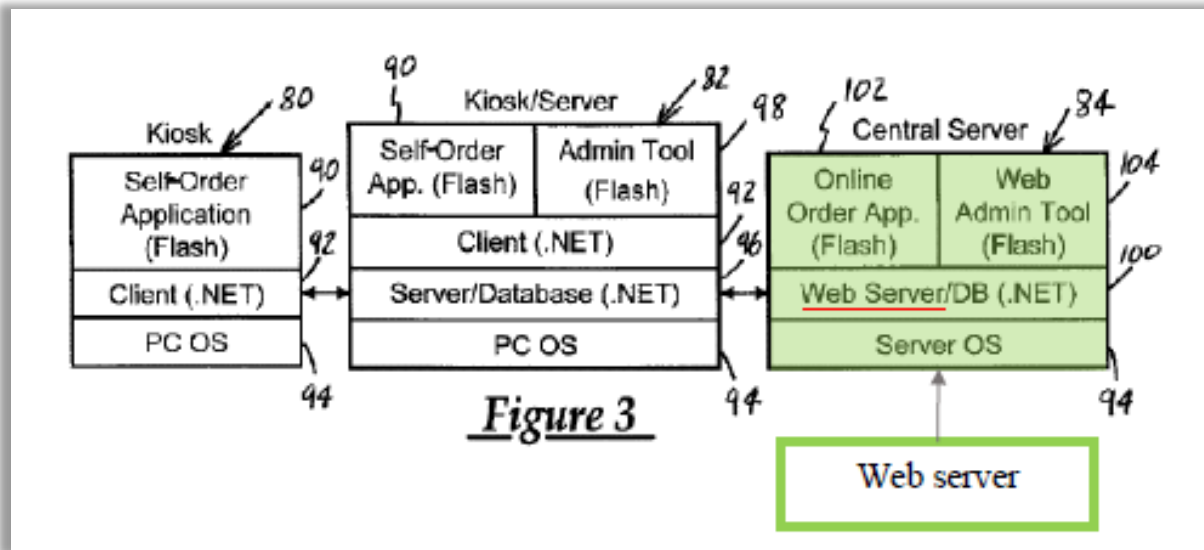


In contrast, the system described in *Woycik*, requires **a local server that is on-site** in each store. EX1004, [0071] (“In general, a single store location will include at least one local server 16 and at least one client kiosk 30.”).

Petitioner and Dr. Mowry's fundamental misunderstanding of the claimed technology is shown in the annotated Figure 3 drawing from Dr. Mowry's declaration. Unlike the claimed technology, which communicates directly from the web server to the POS system located in the store, *Woycik's* system and software communicates from the central server 84 to the in-store local server 82 to the kiosk 80. EX1004, Fig. 3. As shown in Figure 3, central server 84 does not communicate to kiosk 80 via the internet. Dr. Mowry fundamentally misrepresents the role, functionality, and "advantages" of the local server described and claimed in *Woycik*. *Id.* at [0095]; EX2015, ¶62. Indeed, Petitioner's only evidence in support of its assertion that *Woycik* teaches "a web-based point of sale (POS) builder system" and "a web server including POS builder software installed thereon" is the opinion of its Declarant Dr. Mowry. Petition, 14 (citing EX1002, ¶¶43-44 and EX1004). In fact, Dr. Mowry's declaration merely repeats, *verbatim*, the conclusory assertions for which it is offered to support. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, 15 (P.T.A.B. Aug. 24, 2022) (precedential). Therefore, Dr. Mowry's declaration testimony is conclusory and unsupported, and adds little to Petitioner's assertion for which it is offered to support. This is especially true given the functionality and advantage of the system described by *Woycik* is the local server 82⁹ which

⁹ Petitioner cuts off the local server (server/client 16) of Figure 1 and fails to identify the administrative tool 98 of kiosk/server 82 in Figure 3. Petition, 17.

communicates with central server 84. EX2015, ¶62. In fact, as shown in the annotations to Figure 1 and Figure 3 of *Woycik*, local kiosk 80 communicates with local server 82 via LAN 40, and never communicates directly with central server 84. *Id.*; EX1004, Figs. 1 and 3 (annotated).



EX1002, 80.

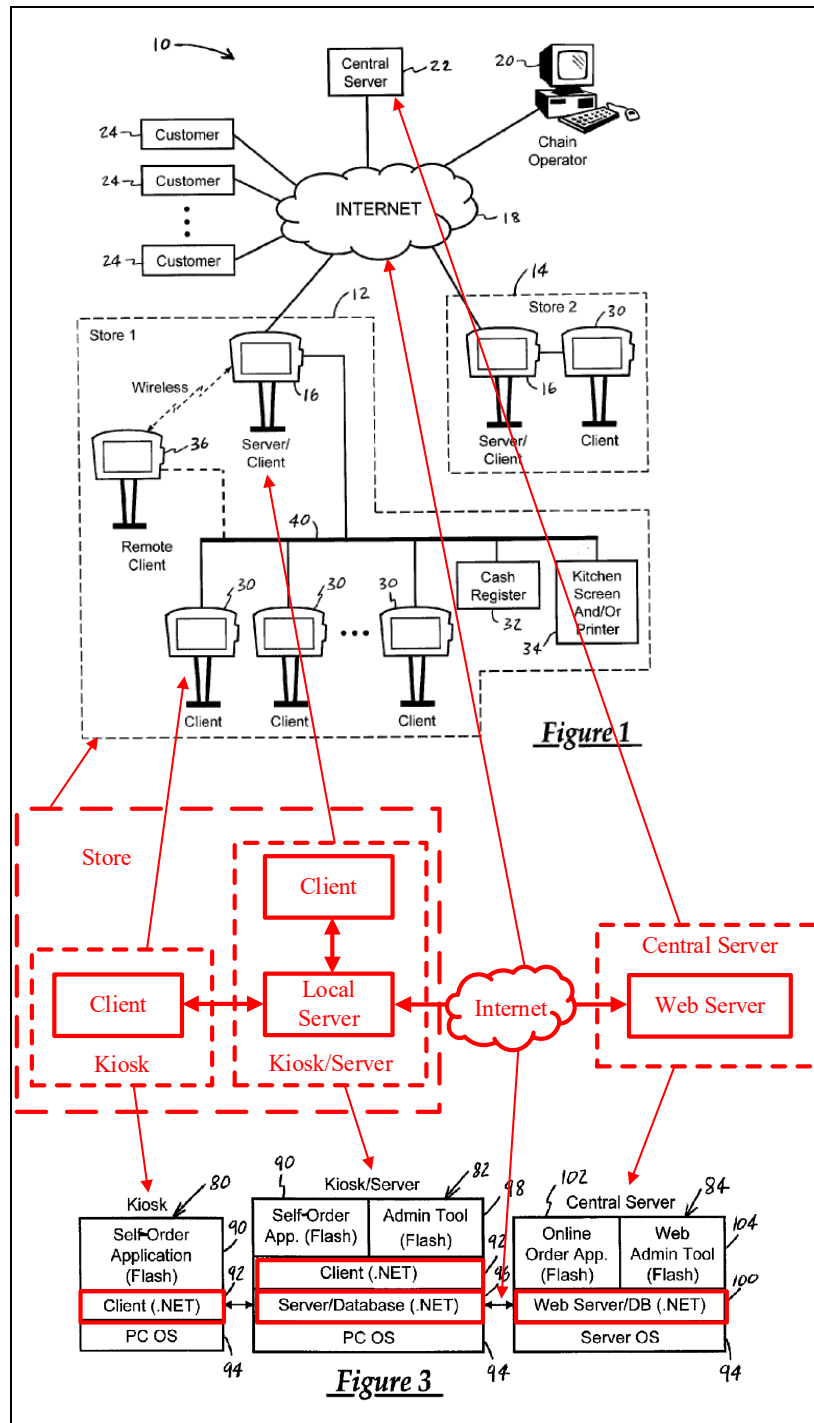


Figure 3

EX1004, Figs. 1 and 3 (annotated).

Therefore, Dr. Mowry's declaration should be given little weight. Thus, Petitioner has not shown a likelihood of success with respect to at least one challenged claim, and the Board should deny institution.

4. Claims 1 and 14

a) *Woycik requires an in-store server*

Woycik does not disclose a “web-based point of sale (POS) builder system”¹⁰ at least because *Woycik* requires an in-store server and not the Internet. Like the prior art before the '012 Patent, *Woycik* requires a server at each store. EX2015, ¶64. Referring to Figure 1, *Woycik* states: “In general, a single store location will include **at least one local server 16** and at least one client kiosk 30.” EX1005, [0071] (emphasis added); EX2015, ¶64. In fact, each embodiment in *Woycik* has a local server in the store, including the “local server kiosk” that “includes an administrative tool.” EX1005, [0095]; EX2015, ¶64. In some cases, a “server kiosk” (EX1005, [0095]) may function as a “local server” for the other kiosks in the store, such that “one of the kiosks 16 is used both as **a client** to permit customer entry of orders and as **the local server**...” EX1005, [0072]; EX2015, ¶64. In the case of the computer of the server kiosk, the client portion of the server kiosk and the server portion of the server kiosk have independent roles: “This is accomplished

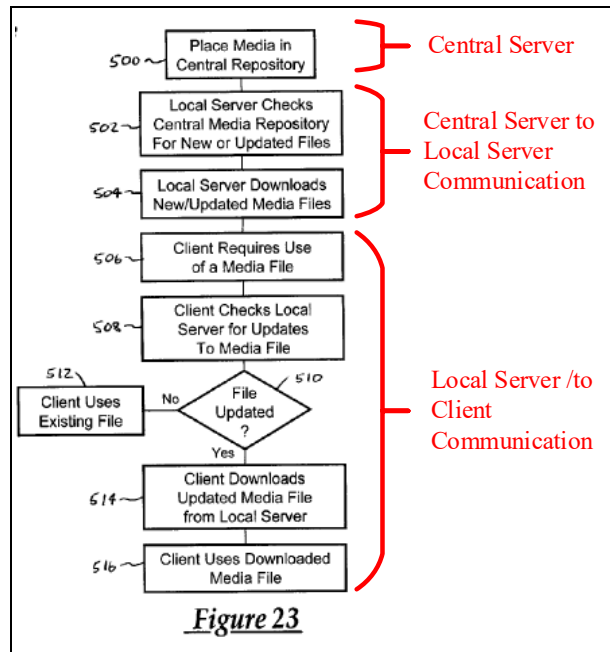
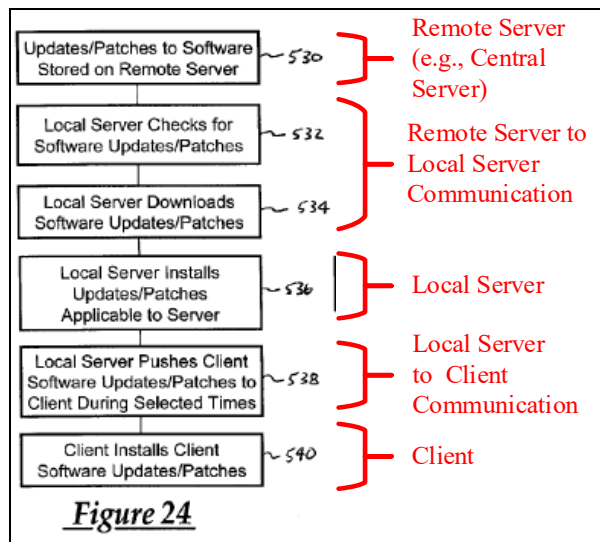
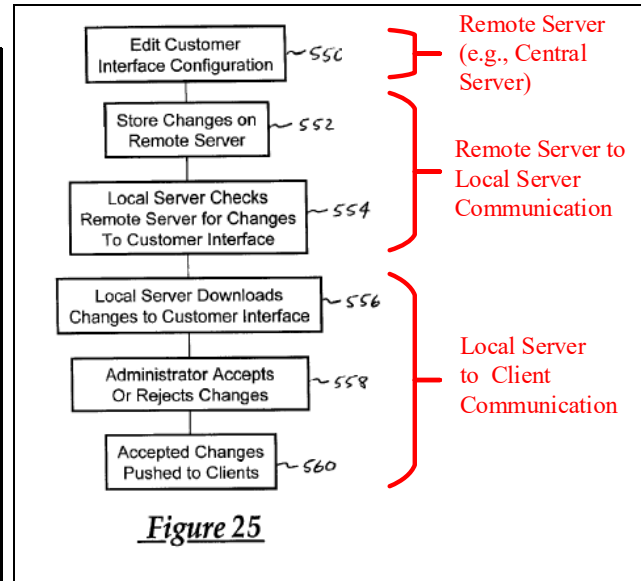
¹⁰ Properly construed, a “web-based point of sale (POS) builder system” is “a point of sale (POS) builder system that requires the internet.” *See* Section IV.A.

by providing separate client and server software both on a single one of the kiosks 16.” EX1005, [0072] (emphasis added); EX2015, ¶64.

Woycik does not disclose POS builder software running on a web server. Rather, like other systems before the '012 Patent (EX2015, ¶65), *Woycik* relies on in-store servers to run its deficient computer-based ordering system. In one example, *Woycik* describes that “the configuration data for the kiosks, menus, and items can be stored on the server kiosk 16, 82 and downloaded to the client kiosk 30, 80.” EX1005, [0095] (emphasis added); EX2015, ¶65. As another example, when changes are made using the administrative tool, “[a]ll media and configurations of menus, items and options are saved on the server kiosk,” which is in-store. EX1005, [0115] (emphasis added); EX2015, ¶65. In a third example, when media updates for the kiosks are to be made, “[t]he new media can be placed on the server kiosk and then pushed to the client kiosks, or the clients can periodically check for new media.... Using this approach, the server updates the clients by storing the media in a media folder on each client.” EX1005, [0115] (emphasis added); EX2015, ¶65. In each case, local kiosks rely and are dependent on the local server to operate.

Each of Figures 23, 24, and 25 of *Woycik* illustrate examples of *Woycik*'s reliance on an in-store, local server (server of the server kiosk 16, 82), even when a

client receives communications from the central server; Figure 3 illustrates the components referenced in Figures 23, 24, and 25:



In each example, the local server of the server kiosk acts as the middleman for all communications: the “remote server such as the central server 22 of FIG. 1” (EX1005, [0117]) communicates only with the local server, while the client likewise

only communicates with the local server (and not the remote server, which has the web server). EX2015, ¶¶66-67. Therefore, *Woycik* does not disclose a “web-based point of sale (POS) builder system.

b) Woycik does not teach point of sale builder software installed on the web server of a web-based POS builder system

Woycik does not disclose “a web server including POS builder software installed thereon” at least because *Woycik* does not teach (or even mention) POS builder software, let alone POS builder software that runs on the web server of a web-based POS system. Rather than teaching POS builder software hosted on a web server, or POS builder software requiring the Internet, *Woycik* teaches a local version of its administrative tool that runs on a server kiosk (the in-store server) that serves the other kiosks in the store, and a remote version of its administrative tool that runs on the central server and works with the local version of the administrative tool to configure the server kiosk. At the time of *Woycik*, such kiosks and servers required specialized personnel to implement customizations. EX2015, ¶69.

First, and fatally for Petitioner, *Woycik* does not mention or refer to “**POS builder software**” “**builder software**” or a “**builder**,” let alone such builder running on a **web server**. EX1005, *passim* (emphasis added); EX2015, ¶70.

Second, for the local version of the administrative tool, *Woycik* states that its “administrative tool 98” is “used on the kiosks” in the store. EX1005, [0082];

EX2015, ¶71. Specifically, the local version of the administrative tool runs on the server kiosk. EX1005, [0095] (“The local server kiosk (**16**, FIG. 1; **82**, FIG. 3) includes an administrative tool (**98**, FIG. 3).”); EX2015, ¶71. The administrative tool 98 is used to configure the server program of the server kiosk. EX1005, [0079]; EX2015, ¶71. Each embodiment of *Woycik* includes at least the local version of the administrative tool. EX1005, [0075], [0079], Figure 3; EX2015, ¶71.

For the remote version, the administrative tool is merely used to provide access to the local version of the administrative tool running on the server kiosk for configuration of the server kiosk (which is a local, in-store server). EX1005, [0075]; EX2015, ¶72. As such, *Woycik* teaches using the remote version of the administrative tool to save configuration information to the local version, and thus to the in-store server of the server kiosk. *Id*; EX1005, [0075].

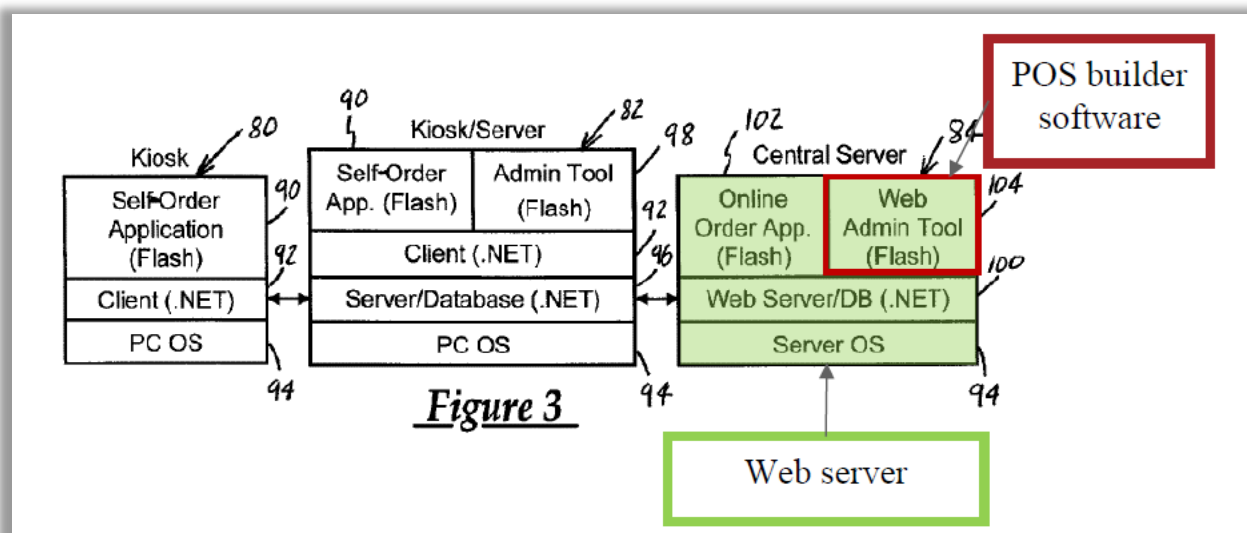
Whichever version of the administrative tool that is used—whether running locally, or locally with remote access—*Woycik* teaches that the local administrative tool configures the server kiosk. EX2015, ¶73. The configured server software at the server kiosk can then communicate with the separate kiosks (the clients) that are located in-store with the server kiosk. EX2015, ¶73.

Therefore, *Woycik* fails to disclose “a web server including POS builder software installed thereon.”

c) *Woycik does not teach a POS builder interface accessible via network communications with a web server*

The administrative tool and web server of *Woycik* identified by Petitioner are **co-located at the central server**. *Woycik* does not disclose or teach a POS builder interface accessible **over a communications network** with a web server and **configured to access the POS builder software**.

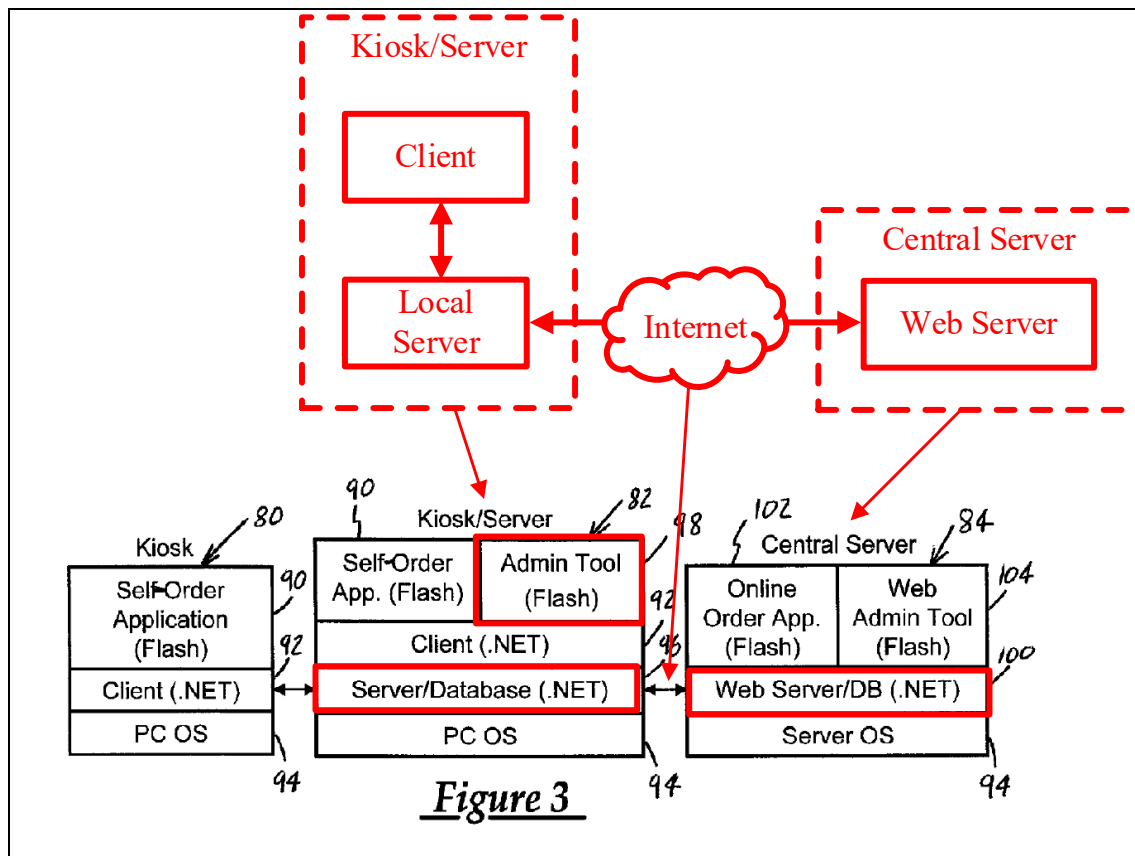
The Petition itself illustrates “POS builder software” co-located with the “Web server,” not communicating over a communications network:



Petition, 24. As *Woycik* describes with reference to Figure 1, the kiosk/server is connected to the central server via the Internet. EX1005, [0071]; EX2015, ¶¶75-76. However, those portions of *Woycik* that reference using the administrative tool via a communications network (the Internet), refer to the remote version of the administrative tool, which accesses the **local version** of the administrative tool **at the local server** via the communications network. EX1005, [0122]; EX2015, ¶76.

The administrative tool accessing the **local server** is different than accessing the **web server at the central server**.

Those portions of *Woycik* where the administrative tool is separated from the web server via a communications network (e.g., the Internet), the administrative tool is the local version modifying kiosk configurations **at the local server**, not accessing the web server via the communications network. *E.g.*, EX1005, [0095] (“**All** of these settings are **stored on the local server** 16, 82. The administrative tool 98 allows an administrator to **modify these settings via a local kiosk touch screen**.” (emphasis added)); EX2015, ¶77. Figure 3 illustrates this relationship:



EX1005, FIG. 3 (annotated); EX2015, ¶77.

Therefore, *Woycik* fails to disclose “a POS builder interface configured to be accessible via network communication with said web server over a communications network, wherein said POS builder interface is configured to be utilized to access said POS builder software.” EX2015, ¶78.

B. Ground 2 – *Olson* and *Woycik*

Ground 2 fails because *Olson* is not prior art to the '012 Patent under 35 U.S.C. § 102(e). Additionally, the Petition fails to demonstrate that *Olson* and *Woycik*—alone or in any combination—disclose “a web server including POS builder software installed thereon” and “a POS builder interface configured to be accessible via network communication with said web server over a communications network” EX1001, Claim 1 (emphasis added). Also, the Petition fails to demonstrate that *Olson* and *Woycik* disclose features recited in Claims 2-20. Further, Petitioner fails to show that the purported knowledge of a POSITA cure these deficiencies. Moreover, Petitioner fails to show that a POSITA would be motivated to combine *Olson* and *Woycik*.

1. *Olson* is not prior art

Petitioner has failed to show that *Olson* qualifies as prior art, which is fatal to Ground 2 of the Petition. Petitioner relies on *Olson* as the web server in combination with the administrative tool of *Woycik* for the two independent claims, and thus for all of Claims 1-20. Petition, 46-59, 65-66.

Petitioner asserts that “*Olson* is prior art under § 102(e) as a published application ‘by another.’” Petition, 6-7 (citation omitted). However, *Olson* is not prior art under §102(e) because it is exempted under 35 U.S.C. §103(c)(1), which states:

Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102, shall not preclude patentability under this section where **the subject matter and the claimed invention were, at the time the claimed invention was made,** owned by the same person or **subject to an obligation of assignment to the same person.**

(emphasis added).

The subject matter in *Olson* and the claimed invention in the ’012 Patent were, at the time the claimed invention was made, subject to an obligation of assignment to the same person. Indeed, statements in the file history of the ’640 Patent, from which the ’012 Patent claims priority, confirms the subject matter of *Olson* and the claimed invention in the ’012 Patent were assigned to the same assignee.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	IBM 4690 ASTRA - Graphical User Interface (GUI) - Specifications, found 02/08/2008, http://www-03.ibm.com/roducts/retail/product/software/gui/astra/specs.html , 1 page.	
	2	Soft32Download, db2k e-Store Builder 3.00 details, Localsoft Tech, found 02/08/2008, http://www.soft32download.com/software/db2k-e-Store-Builder-download-details.html , pp. 1-3	
	3	Co-pending US Patent TY06-003, Serial # 12/012,393, Filed 02/01/08, "Hand-Held Web Browser Inventory Checking System," assigned to the same assignee as the present invention.	
	4	Co-pending US Patent TY06-001, Serial # 11/710,722, Filed 02/26/07, "Point of Sale System with Web-Based Back-Office," assigned to the same assignee as the present invention.	
	5	Co-pending US Patent TY06-002, serial # 11/710,723, Filed 02/26/07, "Point of Sale Video Server Processing System, assigned to the same assignee as the present invention.	

EX2024-268; EX2005-EX2007.

Thus, Ground 2 fails at least because *Olson* is not prior art to the '012 Patent.

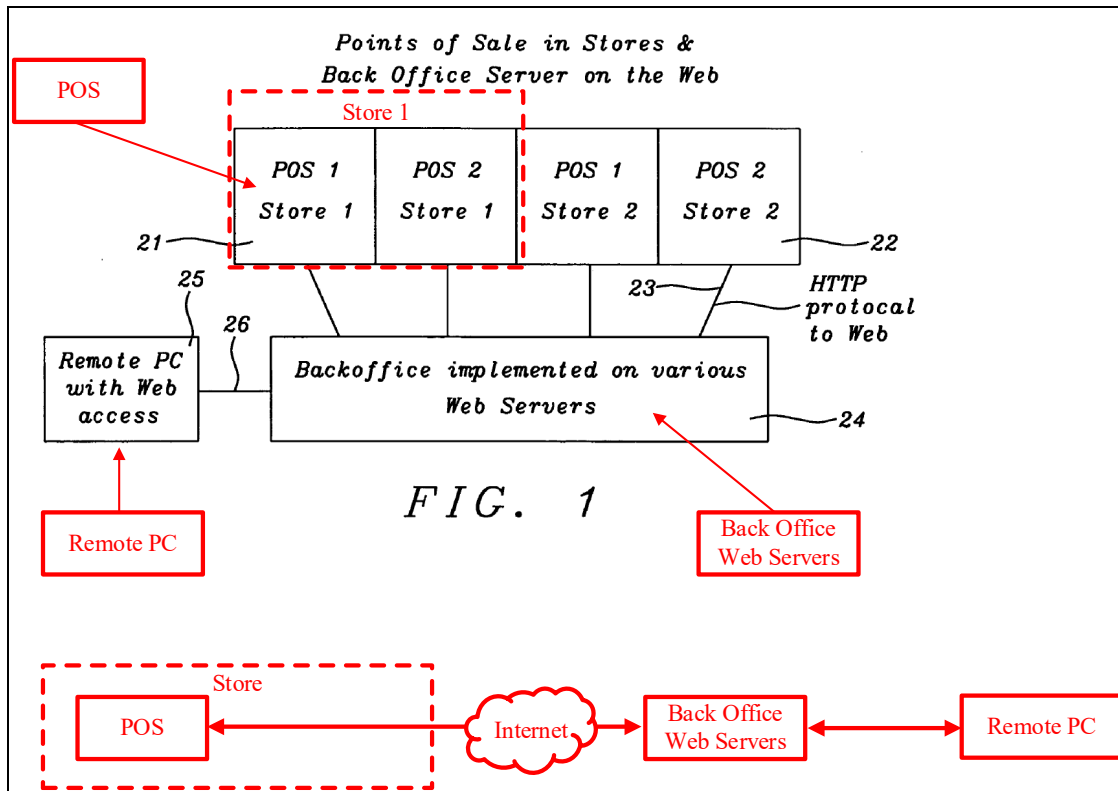
2. Overview of *Olson*

Olson is titled POINT OF SALE SYSTEM WITH WEB-BASED BACK-OFFICE. EX1006, 1. The inventor is Quentin Olson who, along with Wayne Baratta, is a co-inventor of the '012 Patent. EX1001, 1. Additionally, *Olson* is incorporated by reference into the '012 Patent. EX1001, 8 (“This application is related to... Ser. No. 11,710,722 ... [and is] incorporated by reference in its entirety.”).

Olson states that “[i]t is the objective of this invention to provide a system and a method for a system and an apparatus for managing a range of businesses,” including the “business operations” of one or more stores. EX1006 [0010]; EX2015, ¶56. In particular, *Olson* specifies that the “invention relates to the managing of the points of sale (POS) with Web-based back-office systems.” EX1006 [0010];

EX2015, ¶56. A POSITA would have generally understood back-office systems to be the systems supporting activity necessary for the running of the business removed from and unseen by a customer receiving direct contact at the POS (the front-office systems). EX2015, ¶56. Examples of business activities supported by the back-office include finance, logistics, distribution, manufacturing, marketing, sales, inventory, management, security, loss prevention, and human resources. *Id.*

Figure 1 of *Olson* (see below) illustrates a “high level diagram of this invention.” EX1006 [0017]; EX2015, ¶57. The architecture of *Olson* employs one or more POS terminals 21/22 in each store. EX1006 [0017]; EX2015, ¶57. Each POS normally operates with a connection 23 via the internet to a back office 24, but this is a “loose coupling” and the connection is “not required for the basic business functions of the POS.” EX1006 [0017]; EX2015, ¶57.



EX1006, FIG. 1 (annotated).

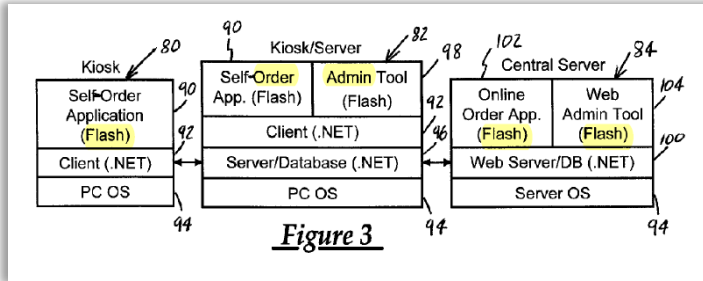
Each POS of *Olson* (a “POS terminal 10”) includes a core transaction Engine 20 that is “software which processes all input and output at the POS terminal and invokes the appropriate retail logic.” EX1006 [0021]; EX2015, ¶58. The core transaction engine interfaces with a number of configurable modules 30 that define the functions (“the meaning and processing”) of keys of the terminal. EX1006 [0021]-[0022]; EX2015, ¶58. Examples of the configurable modules implementing different POS terminal functions include a “Total key” module, “Cash Tender module,” and “Sub-Total module.” EX1006 [0021]-[0022]; EX2015, ¶58. The configurable 400 modules are “preferably implemented in a computer language such as JAVA,” allowing for the modules to be changed via updates to the programming

of the module, for example using “a JAVA-type object-oriented language.” EX1006, [0021]-[0024]; EX2015, ¶58. Specifically, *Olson* provides that if an end user of the POS wants to modify how a key operates, modification of the JAVA programming is needed, and the “event model” used is “familiar to most GUI application programmers.” EX1006, [0024]; EX2015, ¶58.

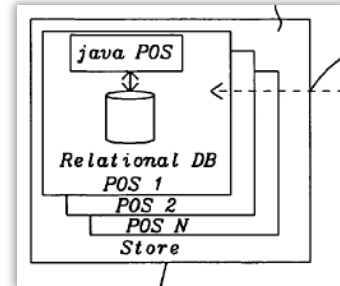
During operation, the POS stores data generated from transactions in a relational database at the POS. EX1006, [0017], [0025]; EX2015, ¶59. The POS then periodically uploads this transaction data to the BO via the BO interface. EX1006, [0017]-[0019]; EX2015, ¶59. The BO may then store the transaction data from the POS in another relational database at the BO. EX1006, [0025]-[0026]; EX2015, ¶59. If the BO is not accessible, the POS may continue to operate, storing transaction data and attempting to transmit the transaction data to the BO once the BO is accessible. EX1006 [0019]; EX2015, ¶59. A POS may also request updates from the BO, “such as new items, price changes, employees, etc.” EX1006 [0019]; EX2015, ¶59.

3. Petitioner fails to show a reasonable expectation of success to modify the system of *Olson* based on the teaching of *Woycik*

Neither Petitioner nor Dr. Mowry explain how the “java POS” system of *Olson* can be modified with the Flash POS system of *Woycik*.



EX1004, FIG. 3 (highlighted)



EX1006, Fig. 4 (excerpt)

Indeed, when describing *Olson*, Petitioner states, “[e]ach POS-terminal ... is implemented with ‘personal computer hardware and software.’” Petition, 51 (citations omitted). Then, in a conclusory manner, Petitioner provides that a “POSITA would have been motivated to add the web-based administrative tool taught by *Woycik* to the web-based POS system taught by *Olson* and would reasonably expect the combination to improve the usability and configurability of *Olson*’s web-based POS system.” EX1002, ¶121. However, both Petitioner and Dr. Mowry fail to distinguish or note that each of the systems taught in *Olson* and *Woycik* have fundamentally different software platforms. Indeed, neither Petitioner nor Dr. Mowry explain how the systems and software platforms would be compatible or changed. EX2015, ¶¶79-82.

4. Claims 1 and 14

- a) *Olson and Woycik do not teach point of sale builder software installed on the web server of a web-based POS builder system*

The combination of *Olson* and *Woycik* does not disclose “a web server including POS builder software installed thereon” at least because *Woycik* does not teach (or even mention) POS builder software, let alone POS builder software that runs on the web server of a web-based POS system.

As discussed above, *Woycik* relies on an administrative tool that runs on a local server kiosk running in a same store with other kiosks, and *Woycik*’s teaching is limited to technology requiring such a local server. *See* Sections VI.A.2-VI.A.4; EX2015, ¶84.

Like *Woycik*, *Olson* also does not teach a web server including POS builder software installed thereon, and thus cannot be relied upon to cure the deficiencies of *Woycik*.

First, *Olson* is entirely silent with respect to a “**point of sale builder software**” or a “**builder**” or “**to build**” or “**to edit**” POS terminals. EX1006, *passim* (emphasis added); EX2015, ¶¶85-86.

Second, those portions of *Olson* identified by Petitioner also fail to disclose “a web server including POS builder software installed thereon,” as recited by Claim 1. The portions cited by Petitioner identify back office (BO) software of

Olson that runs on web servers. Petition, 49-55. As discussed above, the BO of *Olson* can receive and store transaction data from a point of sale (POS) in a relational database, and provide certain updated information to the POS when requested by the POS. EX1006 [0017]-[0019]; EX2015, ¶87. However, neither function describes “a web server including POS builder software installed thereon.” Receiving and storing transaction data from a POS is unrelated to POS builder software. EX2015, ¶87. And the BO software on a web server providing updated information to a POS is different than building or editing a POS terminal. *Id.* *Olson* does not describe that the BO software creates or modifies the way that the POS terminal operates, looks, or processes using retail logic, but that the BO software can provide to the POS terminals certain updated information for the terminal to use. EX1006 [0019]; EX2015, ¶87.

That *Olson* does not describe POS builder software on a web server can be seen clearly by how *Olson* teaches a user modifying a POS terminal. For example, Figure 2 of *Olson* is a “POS terminal 10” that includes a “core transaction Engine 20.” EX1006 [0021]; EX2015, ¶88. The core transaction engine “interfaces with configurable modules 30, which handle the meaning & processing of terminal keys required.” EX1006 [0021]; EX2015, ¶88. The configurable modules 30 are “preferably implemented in a computer language such as JAVA.” EX1006 [0022], [1025] (“Stores 31, 32 illustrate several POS implemented with Java software using

relational databases.”); EX2015, ¶88. The end user of the POS terminal is then allowed to make changes to these configurable modules through programming in Java. EX1006 [0024]; EX2015, ¶88. According to *Olson*’s discussion, the POS terminal is the “client,” and Java is specified as “**client-side** JavaScript.” EX1006 [0026] (emphasis added); EX2015, ¶88.

Therefore, the combination of *Olson* and *Woycik* does not disclose “a web server including POS builder software installed thereon” as recited in Claim 1.

b) Olson and Woycik do not teach a POS builder interface accessible to a web server over a communications network

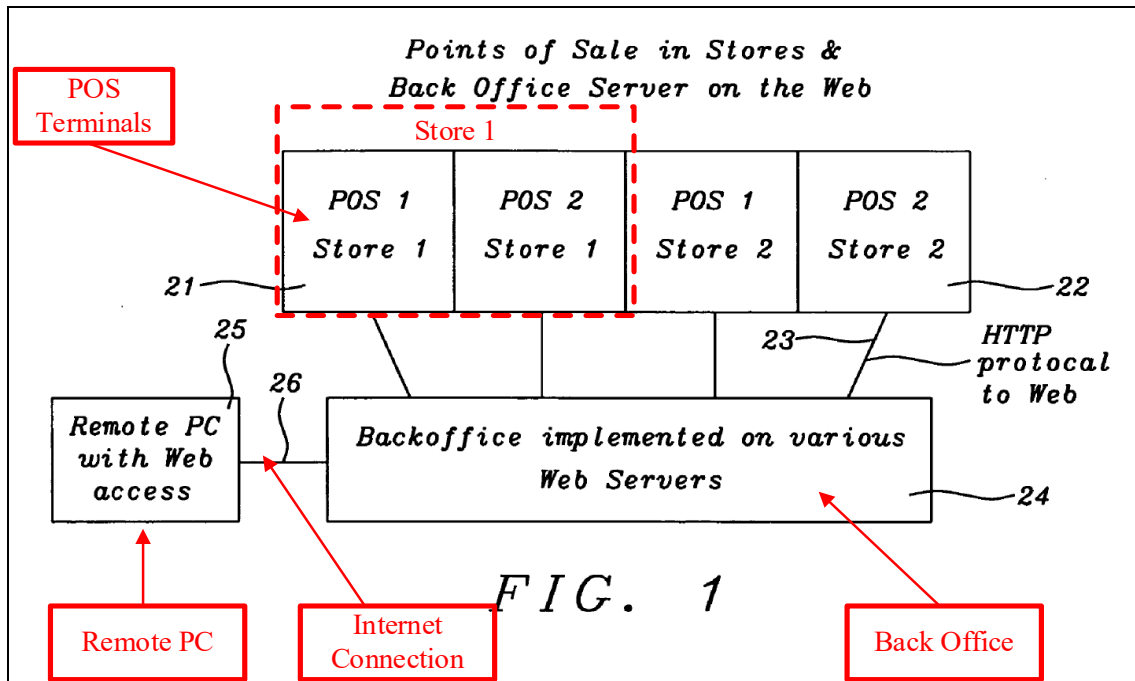
The administrative tool and web server of *Woycik* identified by Petitioner are **co-located at the central server**. As discussed above, *Woycik* does not teach a web server accessible to a POS builder interface “**over a communications network**” and configured “**to access said POS builder software**.” See Sections VI.A.2; EX2015, ¶90.

Like *Woycik*, *Olson* does not disclose this feature, and cannot be relied upon to cure the deficiencies of *Woycik*. Rather, *Olson* alludes to providing **back office software** via a SAAS distribution model (e.g., via the internet). EX2015, ¶91. *Olson* states that “the back-office system can be provided as a service,” noting “Software as a Service (SAAS) is a software distribution model in which applications are hosted by a vendor or service provider and made available to customers over a

network, typically the Internet.” EX1006 [0027]; EX2015, ¶91. However, *Olson* describes a BO system that stores transaction data and provides other administrative support. EX2015, ¶91. Thus, even to the extent that *Olson* discloses providing its BO software, BO software over the internet is entirely different than “a POS builder interface” over the internet.

Therefore, the combination of *Olson* and *Woycik* does not disclose “a POS builder interface configured to be accessible via network communication with said web server over a communications network, wherein said POS builder interface is configured to be utilized to access said POS builder software,” as recited in Claim 1.

First, Petitioner relies on *Olson*’s statement that “‘BO software and data can be viewed from any store employee at any PC who has Internet access 26 and a password’ via web access to the BO server....” Petition, 7, 46-47. *Second*, Petitioner relies on *Olson*’s statement that “a real-time status of said POS terminals and said back-office web servers is obtained at remote locations via personal computers with browser based web access.” *Id.* at 62. In both cases, and as clearly shown in Figure 1, this remote access is to the back office, and not to POS terminals:



EX1006, FIG. 1 (annotated); EX2015, ¶91.

Thus, the combination of *Olson* and *Woycik* does not render independent Claims and 14 obvious.

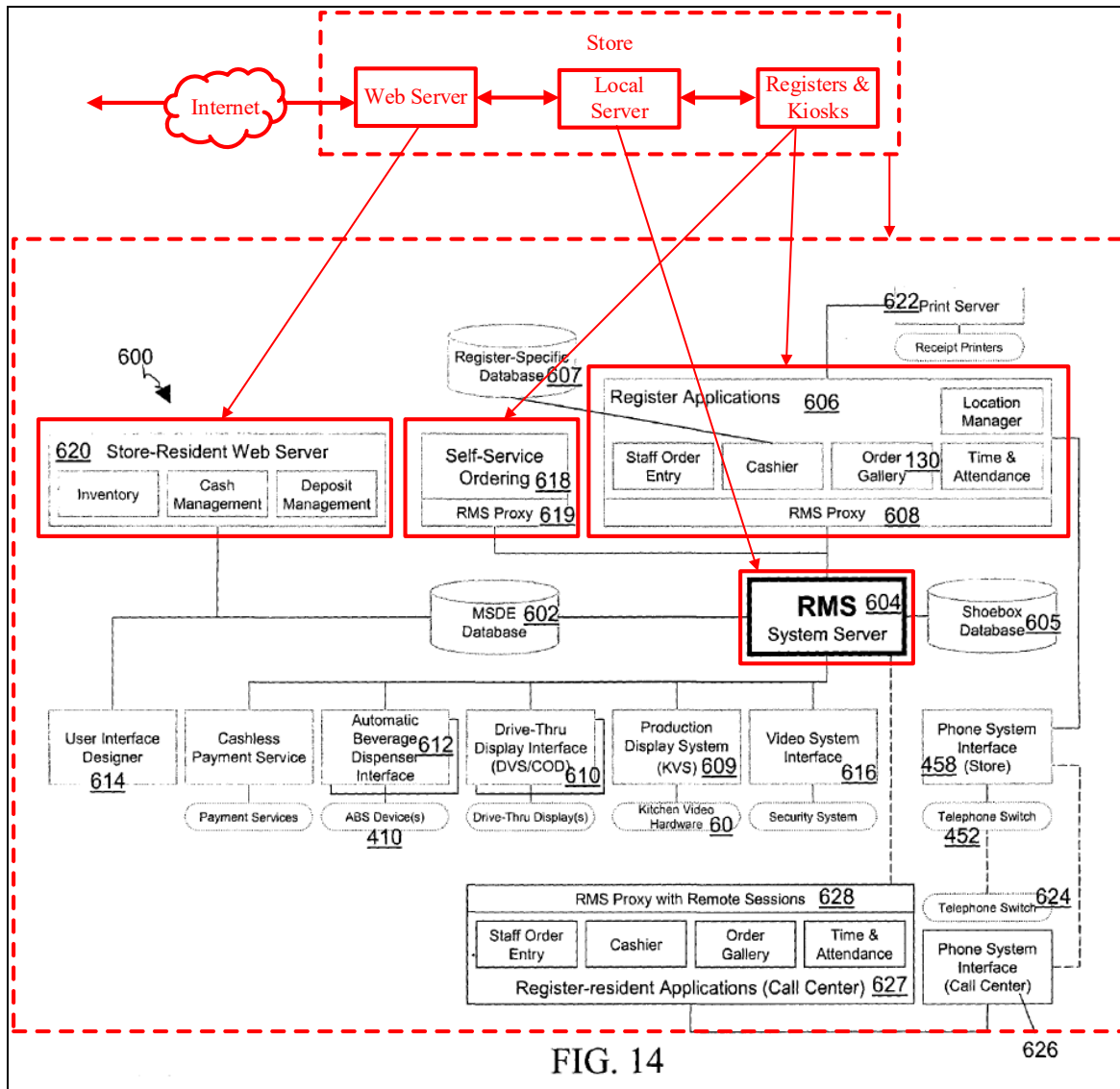
C. Ground 3 – *Tengler*

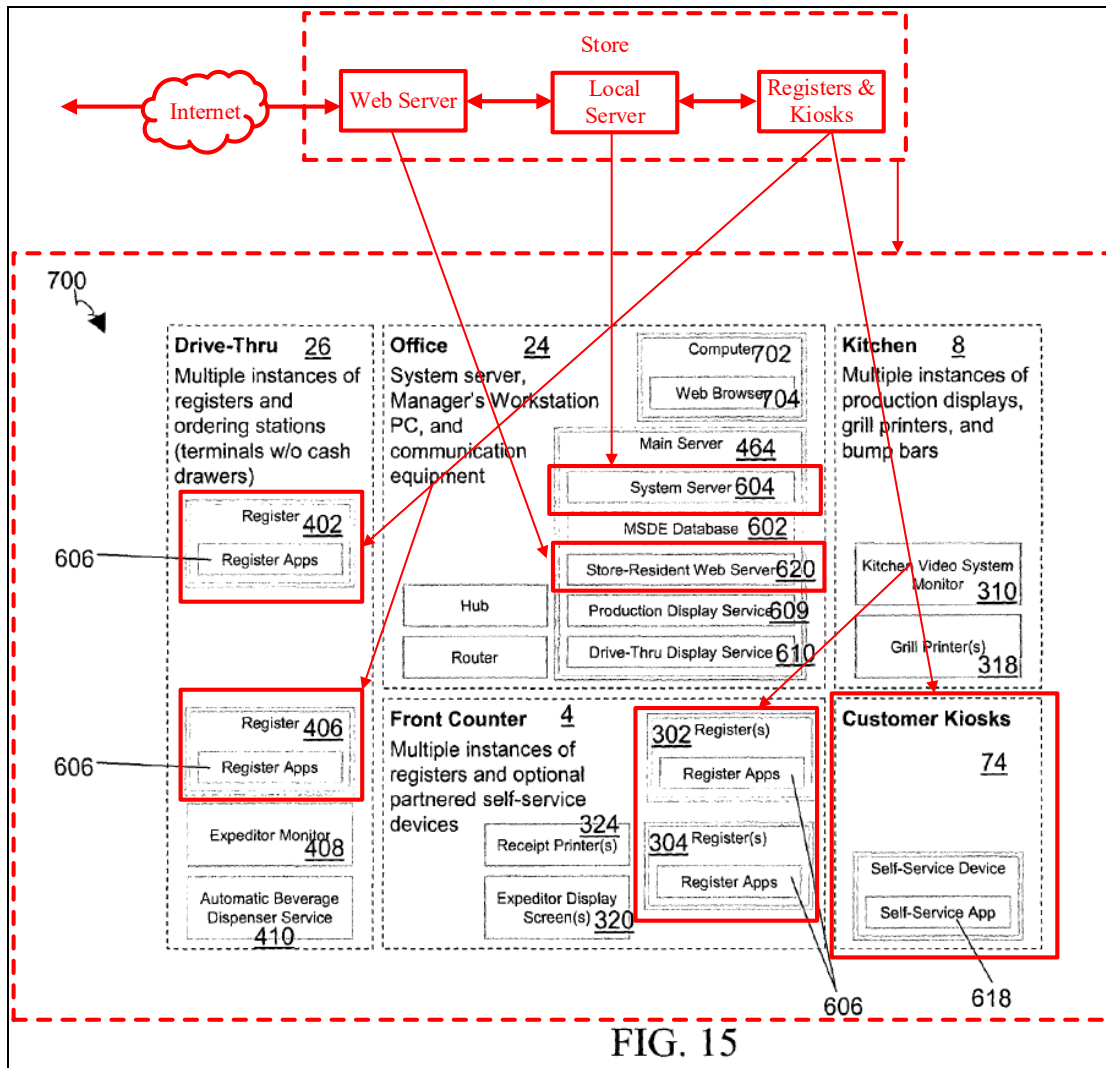
Ground 3 fails because the Petition fails to demonstrate that *Tengler* discloses a “**web-based point of sale (POS) builder system**,” “said POS builder interface is configured to be utilized to access said POS builder software,” and “a **web server including POS builder software** installed thereon” and EX1001, Claim 1 (emphasis added). The Petition also fails to demonstrate that *Tengler* discloses features recited in Claims 2-20. Further, Petitioner fails to show that the purported knowledge of a POSITA cures these deficiencies.

1. Overview of *Tengler*

Tengler discloses order processing for goods or services. EX1005, [0048]; EX2015, ¶60. The “commercial context in which orders for goods or services are processed” in *Tengler* includes a “quick-serve restaurant,” that “uses restaurant management software and a database to manage the placing of orders, the entry of orders, the preparation of the food..., and the assembly and delivery of the orders,....” EX1005, [0049]; EX2015, ¶60. Figures 14 and 15 illustrate the complex software architecture of *Tengler*’s restaurant management software, which includes a local server (RMS system server 604), web server (store-resident web server 620), one or more registers and/or kiosks, and a Microsoft Data Engine (MSDE) database¹¹ for the local server:

¹¹ Note that MSDE databases are proprietary databases that require programmers to implement. EX2015, ¶¶33-34.





EX1005, FIGs. 14, 15; EX2015, ¶60. *Tengler* requires a complete server installation for each store. See EX1005, FIGs. 1-2 and 11-15 (illustrating single store installations with a server); EX2015, ¶60.

The store of *Tengler* has a main server that includes both an in-store server for the local, in-store devices, as well as a web server to provide access allowing management to view status within the store. EX1005, [0116] (“main server computer 464 runs the system server software 604, the database 602, the store-

resident web server software 620”); EX2015, ¶61. “The server **604** stores restaurant status and order status information for local viewing at registers, stations, terminals, and other devices connected to a local area network.” EX1005, [0088]. The in-store, local server (RMS system server 604) is consistently described by *Tengler* as central to communications with and between in-store devices, and necessary to support in-store functions and status-keeping. EX1005, [0088] (“server **604** stores restaurant status”), [0095] (“RMS server **604** keeps restaurant system status, receives order updates from the stations..., broadcasts order status changes to the stations..., updates the database **602** and the shoebox database as required, supports shared cashless payment methods..., and synchronizes [between databases]”); EX2015, ¶61. The “store-resident web server **620** enables external managers to view restaurant status information....” EX1005, [0103]; EX2015, ¶61. *Tengler* also provides that managers can “edit the user interface of the register and self-service applications and also save the specifications in the database **602**” using a “user interface designer.”¹² EX1005, [0103]; EX2015, ¶61. The web server provides

¹² Note that user interface designers for a register or POS, as described in *Tengler*, is consistent with the State of the Art when the ’012 Patent was filed, as discussed above, and is a necessary capability of a POS application. See Section II.A; EX2015, ¶¶32-35 [[these paragraphs are the technology background, but don’t appear to support this]].

access “from off-site (such as the manager’s home or a central corporation office).”

EX1005, [0103]; EX2015, ¶57.

2. Claims 1 and 14

a) *Tengler requires an in-store server*

Tengler does not disclose a “web-based point of sale (POS) builder system” at least because *Tengler* requires an in-store server, and does not require the Internet. Like the prior art before the ’012 Patent, *Tengler* teaches a server at each store. EX2015, ¶¶93-94. Referring to Figure 14, *Tengler* states: “the restaurant management software 600 includes a portion that runs on a central server in the restaurant and is called the restaurant management system (RMS) server 604.” EX1005, [0088]; EX2015, ¶94. *Tengler* continues:

The server 604 stores restaurant status and order status information for local viewing at registers, stations, terminals, and other devices connected to a local area network. The RMS server 604 tracks the current state of restaurant 2 (for example, open or closed) and also tracks the state of all pending orders at all times and stores this information in a “shoebox” database 605.

EX1005, [0088]; EX2015, ¶94. In fact, each embodiment in *Tengler* has a local server in the store. EX2015, ¶94.

Tengler does not teach or describe any POS builder software installed on a web server. EX2015, ¶95. Rather, *Tengler* relies on in-store application servers to run its deficient computer-based ordering system. “For example, the JavaBeans API

used in JavaPOS communicates with Java servers such as J2EE servers and not a web server.” EX2015, ¶95 (citing EX1005, [0115], [0121]).

Therefore, *Tengler* does not disclose a “web-based point of sale (POS) builder system” as recited in Claim 1.

b) Tengler does not teach a POS builder interface that is configured to be utilized to access said POS builder software

As noted in the institution decision, Petitioner “*Tengler* is silent as to whether interfaces 192 and 196 interact with user interface designer 614.” Paper 9, 15. Petitioner considers the “manager GUI interfaces **192, 196**” disclosed by *Tengler* as corresponding to the “POS builder interface” as recited in independent Claims 1 and 14. Petition, 74-84, 98; EX2015, ¶¶97. Petitioner likewise considers the “user interface designer **614**” as corresponding to the “POS builder software.” Petition, 67-81, 98; EX2015, ¶97. Petitioner errs in its contention that “*Tengler*’s manager interfaces [(i.e., POS builder interface)] are utilized to access user interface designer (i.e., POS builder software) for creating or modifying user interfaces of register and self-service applications.” *Id.* at 78-79; EX2015, ¶97. Petitioner combines two separate systems disclosed in *Tengler* in an attempt to recreate the elements of the claimed invention. EX2015, ¶97. This attempt is futile because Petitioner has failed to demonstrate that *Tengler* teaches that the manager GUI interfaces **192** and **196** are used to access the user interface designer **614**. EX2015, ¶97.

To the contrary, *Tengler* teaches that the manager interfaces and the user interface designer are two distinct ways to “edit the user interface of the register and self-service applications.” EX1005, [0103]; EX2015, ¶98. For example, paragraph 103 of *Tengler* states, in pertinent part, “A user interface designer **614** allows management to edit the user interface of the register and self-service applications and also saves the specifications in the database **602**.” EX1005, [0103]; EX2015, ¶98. It further states, “The store resident web server **620** also allows managers to edit the user interface of the register and self-service applications and also saves the specifications in the database **602**.” EX1005, [0103]; EX2015, ¶98. Managers utilize the manager interfaces **192** and **196** to edit the user interface of the register and self-service applications using the web server **620**. EX1005, [0109], [0073]; EX2015, ¶98. Furthermore, “the store-resident web server **620** and the user interface designer **614** [both] directly connect with the database **602**,” EX1005, [0107], Fig. 14; EX2015, ¶98. Finally, *Tengler* explicitly states, “The manager’s interface[s] **192** and **196** are] linked directly to the database in the restaurant (**without the intervention of any intermediary database or process**) ...” EX1005, [0073] (emphasis added); EX2015, ¶98. Therefore, the manager GUI interfaces **192** and **196** are not used to access the user interface designer **614**. EX2015, ¶98.

Essentially, *Tengler* teaches two methods for “edit[ing] the user interface of the register and self-service applications”: *first*, via the user interface designer **614**;

and *second*, via the manager interfaces **192** and **196** accessed through the web server **620**. EX2015, ¶99. If, as Petitioner contends, the manager interfaces **192** and **196** are utilized to access user interface designer **614**, there would be no need for both the user interface designer **614** and the store resident web server **620** to possess the capability to save the updated specifications to the database **602**. EX2015, ¶99.

Additionally, *Tengler* teaches away from using any intermediary process between the manager interfaces **192** and **196** and the database because *Tengler* teaches “the manager’s interface[s] **192** and **196** are] linked directly to the database in the restaurant (without the intervention of any intermediary database or process)....” EX1005, [0073] (emphasis added); EX2015, ¶100.

Thus, *Tengler* fails to teach “wherein said POS builder interface is configured to be utilized to access said POS builder software.” EX2015, ¶100.

c) Tengler does not teach a web server including POS builder software installed thereon

Tengler does not disclose “a web server including POS Builder software installed thereon,” as recited in Claim 1. EX2015, ¶102. Petitioner and its expert, misconstrue the user interface designer **614** disclosed in *Tengler*. *Id.*

Petitioner considers the “main server **464**” disclosed in *Tengler* as corresponding to the “web server” recited in the independent claims. Petition, 75-76. Similarly, as discussed in the previous section, Petitioner considers the “user interface designer **614**” as corresponding to the “POS builder software.” *Id.* at 70;

EX2015, ¶103. Petitioner fails to show that *Tengler* teaches that the user interface designer **614** is installed on the store-resident web server **620** residing on the main server **464**. EX2015, ¶103.

Petitioner recognizes this shortcoming, and thus alleges,

To the extent *Tengler* does not disclose the user interface designer is installed on main server 464, a POSITA would have been motivated to install it there because user interface designer 614 ‘directly connect[s]’ with database 602 and interfaces with web server software 620, both located on main server 464.

Petition, 70 (alteration in original) (citing EX1005, [0107], [0109], [0073]); EX2015, ¶104. Petitioner and its expert, misconstrue the user interface designer **614** disclosed in *Tengler*. EX2015, ¶104.

As discussed in the previous section, *Tengler* does not teach, and in fact teaches away from, Petitioner’s contention that the user interface designer **614** interfaces with the web server **620** installed on main server **464**. EX2015, ¶105; see Section VI.C.2.b. *Tengler* states that both the user interface designer **614** and web server **620** “directly connect with database **602**,” (EX1005, [0107]) (emphasis added), and both have the capability to “edit the user interface of the register and self-service applications and also save[] the specifications in the database **602**.” *Id.* [0103]; EX2015, ¶105. Discrete connections teach that user interface designer 614 is separate and distinct from web server 620. EX2015, ¶105. If user interface

designer 614 was implemented on web server 620, user interface designer 614 would connect to database 602 through web server 620. *Id.* As a result, a POSITA would not understand *Tengler* to teach that the user interface designer **614** interfaces with the web server **620** installed on main server **464**. *Id.*

Tengler does not teach or suggest that the user interface designer **614** is a web application. EX2015, ¶106. Rather, a POSITA would interpret the user interface designer **614** disclosed in *Tengler* as a standalone application (i.e., a desktop or thick client) that directly connects with the database **602** to “allow[] management to edit the user interface of the register and self-service applications.” *Id.* Such a standalone application would not be installed on the main server **464**, but rather a client device such as **702**. *Id.* Further, there is no suggestion that the interface designer **614** is installed on the web server, nor would there be a reason for it to be installed on the web server given the description, albeit minimal, of the function and operation of the interface designer **614** discussed in *Tengler*. *Id.*

Thus, *Tengler* fails to disclose “a web server including POS builder software installed thereon.”

VII. SECONDARY CONSIDERATIONS

A. Evidence of Secondary Considerations

Secondary considerations further confirm the patentability of Claims 1-20. EX2015, ¶¶108-114. Objective indicia of non-obviousness “can be the most

probative evidence of nonobviousness in the record, and enables the [Board] to avert the trap of hindsight.” *Leo Pharm. Prods., Ltd. v. Rea*, 726 F.3d 1346, 1358 (Fed. Cir. 2013). “Secondary considerations evidence can establish that ‘an invention appearing to have been obvious in light of the prior art was not.’” *Apple Inc. v. Int’l Trade Comm’n*, 725 F.3d 1356, 1366 (Fed. Cir. 2013). “[A]ll evidence pertaining to the objective indicia of nonobviousness must be considered before reaching an obviousness conclusion.” *Dome Patent L.P. v. Lee*, 799 F.3d 1372, 1383 (Fed. Cir. 2015).

1. There is a strong nexus between CloudefChange’s claimed invention and the evidence

There is a strong nexus between CloudefChange’s claimed invention and the evidence. The Board must consider whether the offered “evidence of secondary considerations is the ‘direct result of the unique characteristics of the claimed invention.’” *Lectronsonics, Inc., v. Zaxcom, Inc.*, IPR2018-01129, Paper 33, 33 (P.T.A.B. Jan. 24, 2021) (precedential) (quoting *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373-74 (Fed. Cir. 2019)). “[T]here is no requirement that ‘objective evidence must be tied exclusively to claim elements that are not disclosed in a particular prior art reference in order for that evidence to carry substantial weight.’” *Id.* (quoting *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1331 (Fed. Cir. 2016)). Indeed, evidence that the “claimed combination as a whole ... serves as a nexus for

the objective evidence proof of nexus is not limited to only when objective evidence is tied to the supposedly ‘new’ feature(s).” *Id.*

There is a strong nexus between CloudfChange’s claimed invention (recited in Claims 1-4) and CloudfChange’s secondary consideration evidence. As discussed, below, there is evidence that the commercial success of the present invention is due to the novel and unique combination of elements of CloudfChange’s claimed web-based POS builder system, as recited in Claim 1-4.

2. Commercial success

During the jury trial in the NCR Litigation, evidence of NCR’s system and sales were presented. At the conclusion of the trial, a jury verdict was issued finding that: (i) none of the asserted patent claims (Claims 1-4 and 9) were invalid; (ii) NCR’s infringement was willful; and (iii) CloudfChange was entitled to \$13,200,000 in damages. EX2008, 6-8. Despite the jury verdict finding infringement and willfulness, NCR continues to use its Silver Product. The trial testimony in the NCR Litigation established that the NCR Silver product infringed Claims 1-4 and had sales of over \$100 million. EX2010, 164:12-20. Therefore, there is evidence that the commercial success of the NCR Silver product is covered by the claimed combination as a whole as recited in Claims 1-4 of the ’012 Patent. EXs2009-2011, 2023. Accordingly, a nexus between the novel and unique combination of elements of CloudfChange’s claimed web-based POS builder

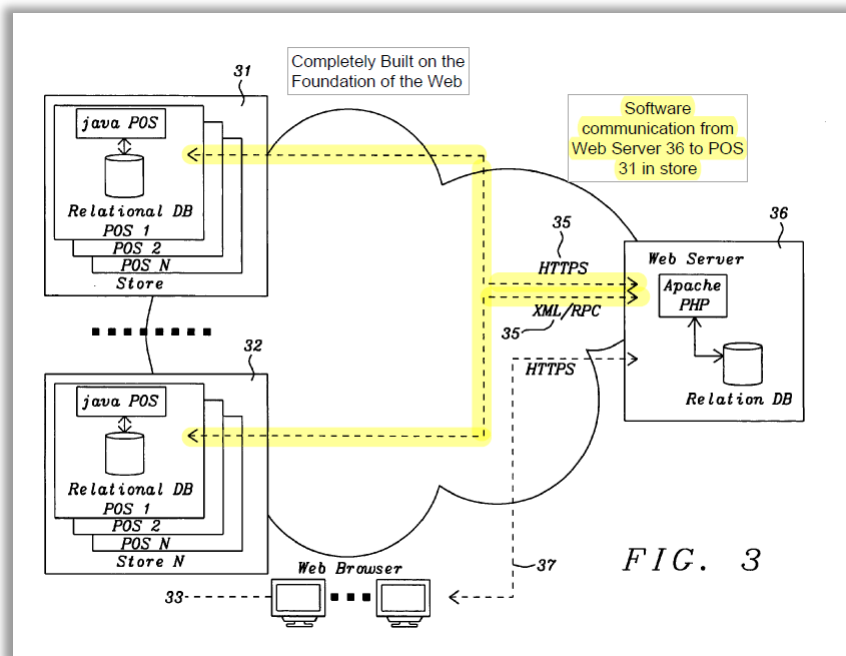
system and the NCR Silver sales is clearly established here. As found by the NCR jury, NCR's silver product embodies the novel and unique claimed features of Claims 1-4 of the '012 Patent. EX2008, 4, 6-8. Therefore, there is a nexus between the claimed invention as a whole, as recited in Claims 1-4 and 9, and the commercial success.

3. Long-felt need

The claimed web-based point of sale builder system embodied in the '012 Patent solved a long felt, but unresolved need. EX2015, ¶112. While traditional point of sale (POS) systems were tethered to in-store servers and required expensive and time-consuming manual software configuration for store and restaurant owners to make even minor changes to menu items or product offerings. *Id.* In contrast, the claimed web-based point of sale system, allowed for more open, more prolific, and more standardized connectivity. More specifically, the patented invention, a web-based point of sale builder system, eliminated these challenges by providing an inexpensive and efficient method for “assist[ing] non-expert business operators in building, editing and testing a point of sale system to manage their businesses” while simultaneously removing the requirement of purchasing and maintaining on site computer servers for POS systems. EX2015, ¶112 (citing EX1001, Abstract, 5:56-58). Accordingly, a need existed for a web-based point of sale builder system

embodied in the '012 Patent. The inventors of the '012 Patent recognized this need, and invented the claimed technology to address the need.

Indeed, prior attempts were unsuccessful, and the prior art teaches away from the claimed solution. For example, *Woycik* discussed at length above, focuses on the advantage of using a local server and not the web-based point of sale system as embodied by the claims of the '012 Patent. By contrast, as CloudofChange explains above, the web-based POS builder system is built completely on the web and the software communicates from web server 36 to POS 31 in-store, as recited in claims. EX1001, Claims 1, 14.



EX1001, Fig. 3 (annotated). The invention of the '012 Patent is directed at an integral solution that allowed for more open, more prolific, and more standardized connectivity. EX2015, ¶1113. The invention of the '012 Patent satisfied the long-

felt need by replacing traditional point of sale (POS) systems with a web-based POS builder system built completely on the web. *Id.* As a result, the invention provides an inexpensive and efficient method for “assist[ing] non-expert business operators in building, editing and testing a point of sale system to manage their businesses” while simultaneously removing the requirement of purchasing and maintaining on site computer servers for POS systems. *Id.*

Moreover, during the jury trial in the NCR Litigation, the jury heard evidence of the long-felt need satisfied by the invention claimed by Claims 1-4 and 9 of the '012 Patent. EX2010, 164:12-20. At the conclusion of the trial, the jury found that the asserted claims of the '012 Patent were not invalid and CloudefChange was entitled to \$13,200,000 in damages. EX2008, 6-7. Thus, there is: (i) evidence of the long-felt need satisfied by Claims 1-4 and 9 of the '012 Patent; and (ii) a nexus between the claimed invention as a whole, as recited in Claims 1-4 and 9, and the long-felt need. EXs2009-2011, 2023. Therefore, the claimed invention embodied in the '012 Patent satisfied a long-felt need. *Id.*

B. Petitioner Fails to State of *Prima Facie* Case of Obviousness Because Petitioner Does Not Address Secondary Considerations (*Graham* Factor 4)

Petitioner's Petition is also deficient for failing to address known evidence of secondary considerations, even if the evidence is non-dispositive. *See ClassCo., Inc. v. Apple, Inc.*, 838 F.3d 1214, 1220 (Fed. Cir. 2016) (finding it an error to dismiss

“evidence of nonobviousness. Even though it was not dispositive evidence..., the Board should have given some weight and consideration to [the] evidence.”). Obviousness under 35 U.S.C. § 103 (Pre-AIA) is a question of law premised on underlying issues of fact, all of which must be considered, including: (i) the scope and content of the prior art; (ii) the level of ordinary skill in the art; (iii) the differences between the claimed invention and the prior art; and (iv) secondary considerations of nonobviousness, such as commercial success, long-felt need, and the failure of others. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

As Petitioner is aware since CloudfChange expressly raised them in its Preliminary Response in IPR2022-00997 (the matter Petitioner is seeking to join), the NCR Silver product has been found to infringe Claims 1, 3-6, and 11-13 of the ’640 Patent. EX2015, ¶111 (Dkt. 159, Jury Verdict). The trial testimony in the NCR Litigation established that the NCR Silver product had sales of over \$100 million. EX2010, 164:12-20.

Astonishingly, the Petition fails to address this commercial success or any secondary considerations evidence at all. There is no credible justification for Petitioner’s failure to address this known evidence of secondary considerations. Petitioner’s failure is fatal to its obviousness arguments. Indeed, Petitioner has the burden of persuasion to prove invalidity, and this burden never shifts to Patentee.

Dynamic Drinkware, LLC v. Nat'l Graphics, Inc., 800 F.3d 1375, 1380 (Fed. Cir. 2015). Petitioner's failure to address known secondary considerations evidence makes the Petition deficient. *ClassCo*, 838 F.3d at 1220; *In re Huai-Hung Kao*, 639 F.3d 1057, 1067-68 (Fed. Cir. 2011) ("To start, when secondary considerations are present, though they are not always dispositive, it is error not to consider them."). And, once a petition is deficient, it is always deficient. 35 U.S.C. § 312(a)(3); 37 C.F.R. § 42.104(b). Therefore, Petitioner's failure to address known evidence of secondary considerations—even if the evidence is not dispositive—at the time of filing its Petition is an error that cannot be cured.

Even if the PTAB does not "impose a requirement on Petitioner to predict and address, proactively, the particular evidence of secondary considerations that Patent Owner may or may not assert based on past proceedings." But, Clover is seeking joinder to IPR2022-00997. Paper 1. Thus, Clover's obviousness analysis and indeed its Petition are deficient for the failure to address secondary considerations at all.

Without a proper obviousness analysis, institution should be denied in view of the compelling merits questions of *Fintiv* Factor 6. *Commscope Techs. LLC v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23, 4-6 (P.T.A.B. Feb. 27, 2023) (precedential) ("the compelling merits standard is a higher standard than the standard for institution set by statute").

VIII. CONCLUSION

For reasons stated herein, the Board should deny institution.

Dated: March 13, 2023

Respectfully submitted,

/B. Todd Patterson/

B. Todd Patterson

Reg. No. 37,906

Lead Counsel for Patent Owner

CERTIFICATION OF SERVICE

I hereby certify that on March 13, 2023, I caused a true and correct copy of the foregoing to be served upon counsel of record via email:

Dated: March 13, 2023

Respectfully submitted,
/B. Todd Patterson/
B. Todd Patterson
Reg. No. 37,906
Lead Counsel for Patent Owner

Jason D. Kipnis Reg. No. 40,680 WILMER CUTLER PICKERING HALE AND DORR, LLP 2600 El Camino Real, Suite 400 Palo Alto, CA 94306 (650) 600-5036 jason.kipnis@wilmerhale.com	Gregory H. Lantier <i>pro hac vice</i> to be requested WILMER CUTLER PICKERING HALE AND DORR, LLP 1875 Pennsylvania Ave, NW Washington, DC 20006 (202) 663-6327 gregory.lantier@wilmerhale.com
Sarah B. Petty <i>pro hac vice</i> to be requested WILMER CUTLER PICKERING HALE AND DORR, LLP 60 State Street Boston, MA 02109 (617) 526-6755 sarah.petty@wilmerhale.com	R. Gregory Israelsen Reg. No. 72,805 WILMER CUTLER PICKERING HALE AND DORR, LLP 1875 Pennsylvania Ave, NW Washington, DC 20006 (202) 663-6215 greg.israelsen@wilmerhale.com
David L. Cavanaugh Reg. No. 36,476 WILMER, CUTLER, PICKERING, HALE AND DORR, LLP 2100 Pennsylvania Avenue NW Washington, DC 20037 Tel: (202) 663-6025 david.cavanaugh@wilmerhale.com	Amy L. Mahan Reg. No. 75,997 WILMER CUTLER PICKERING HALE AND DORR, LLP 60 State Street Boston, MA 02109 (617) 526-6182 amy.mahan@wilmerhale.com

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned hereby certifies that this brief complies with the type-volume limitation of 37 C.F.R. § 42.24 because this brief contains 13,993 words excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a).

Dated: March 13, 2023

Respectfully submitted,

/B. Todd Patterson/

B. Todd Patterson

Reg. No. 37,906

Lead Counsel for Patent Owner