UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NINTENDO CO., LTD., and NINTENDO OF AMERICA INC.,
Petitioners,

v.

ANCORA TECHNOLOGIES, INC.,
Patent Owner.

Case IPR2021-01338
U.S. Patent No. 6,411,941 B1

PATENT OWNER'S SUR-REPLY

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

TABLE OF CONTENTS

Page

I. INTRODUCTION 1

II. CLAIM CONSTRUCTION 2

A. The Plain Meaning of "Agent" Excludes Hardware in the Context of the '941 Patent 2

B. Construing "Agent" as Software-Only Is Consistent with its Plain Meaning and the Disclosure of the '941 Patent 3

C. Ancora's Interpretation of "Agent" is Not Inconsistent with Positions it Adopted in Related District Court Cases 5

D. "Agent" Is Properly Interpreted to Require an OS-Level Software Program or Routine in View of the '941 File History 7

E. The Meaning of "OS-Level" Is Reasonably Certain 10

I. NEITHER HELLMAN NOR CHOU NOR THE ALLEGED COMBINATION DISCLOSES USING AN AGENT TO SET UP A VERIFICATION STRUCTURE IN THE ERASABLE, NON-VOLATILE MEMORY OF THE BIOS 11

A. Hellman Discloses Hardware Used to Store License Records In an EEPROM, and Replacing Hellman's Hardware with Software Would Not Have Been Obvious 12

B. Hellman Does Not Disclose Any Operating System, Nor Would the Asserted Combination Render the Claimed Agent Obvious 14

C. The Reply Does Not Redeem Petitioner's Failed Motivation to Combine Arguments 18

D. Petitioner's Supplemental "Verification Structure" Arguments Did Not Appear in the Petition or the Supporting Wolfe Declaration 19

II. PETITIONER'S MODIFIED HELLMAN, ASSERTED AGAINST DEPENDENT CLAIMS 3, 8, 9, AND 14, RELIES ON THE '941 PATENT

AS THE ROADMAP FOR SELECTING A SINGLE SPECIFIC EMBODIMENT IN A PARTICULAR WAY 20

III. OBJECTIVE EVIDENCE OF NON-OBVIOUSNESS 21

A. The Joint Press Release Establishes Industry Recognition 21

B. Additional Settlement Agreements Show the Value of the ’941 Patent 21

C. Settlements for Less That the Cost of Litigation Have No Value When Evaluating Commercial Success of the ’941 Patent 22

IV. CONCLUSION 24

TABLE OF AUTHORITIES

Page

Cases

Access, Inc. v. Echostar Satellite Corp.,
383 F.3d 1295 (Fed. Cir. 2004) 3
Akzo N.V. v. United States ITC,
808 F.2d 1471 (Fed. Cir. 1986) 20
Ancora Techs., Inc. v. Apple, Inc.,
744 F.3d 732 (Fed. Cir. 2014) 19
Cole Kepro Int'l, LLC v. VSR Inds., Inc.,
695 Fed. Appx. 566 (Fed. Cir. 2017) 22
Ideal Instruments, Inc. v. Rivard Instruments, Inc.,
498 F. Supp. 2d 1131 (Fed. Cir. 2007) 2
Iron Grip Barbell Co. v. USA Sports, Inc.,
392 F.3d 1317 (Fed. Cir. 2004) 22
Kaken Pharma. Co., Ltd. v. Iancu,
952 F.3d 1346 (Fed. Cir. 2020) 7
Mass. Inst. of Tech. v. Shire Pharms., Inc.,
839 F.3d 1111 (Fed. Cir. 2016) 7
Nautilus, Inc. v. Biosig Instruments, Inc.,
572 U.S. 898 (2014) 11
Personal Web Techs., LLC v. Apple, Inc.,
848 F.3d 987 (Fed. Cir. 2017) 17
Rembrandt Wireless Techs., LP v. Samsung Elecs. Co., Ltd.,
853 F.3d 1370 (Fed. Cir. 2017) 7
Straight Path IP Group, Inc. v. Sipnet EU S.R.O.,
806 F.3d 1356 (Fed. Cir. 2015) 3
Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.,
699 F.3d 1340 (Fed. Cir. 2012) 22

Regulations

37 C.F.R. § 42.23 ..... 19, 20

LIST OF EXHIBITS

EXHIBIT NO.	TITLE
1001	U.S. Patent No. 6,411,941 to Mullor et al. ("'941 Patent")
1002	Image File Wrapper of U.S. Patent No. 6,411,941 ("File History")
1003	Declaration of Andrew Wolfe, Ph.D. ("Wolfe Decl.")
1004	U.S. Patent No. 4,658,093 ("Hellman")
1005	U.S. Patent No. 5,892,906 ("Chou")
1006	U.S. Patent No. 5,933,498 ("Schneck")
1007	Reserved
1008	Reserved
1009	Reserved
1010	Reserved
1011	Claim Construction Order, *Ancora Techs., Inc. v. Apple Inc.*, No. 4:11-cv-06357 (N.D. Cal. Dec. 31, 2012) (ECF No. 107).
1012	Final Claim Constructions of the Court, *Ancora Techs., Inc. v. LG Elecs., Inc.*, No. 1:20-cv-00034 (W.D. Tex. June 2, 2020) (ECF No. 69).
1013	Supplemental Claim Construction Order, *Ancora Techs., Inc. v. LG Elecs., Inc.*, No. 1:20-cv-00034 (W.D. Tex. Aug. 19, 2020) (ECF No. 93).
1014	Civil Minutes re Telephonic Markman Hearing, *Ancora Techs., Inc. v. TCT Mobile (US), Inc.*, No. 8:19-cv-02192 (C.D. Cal. Nov. 12, 2020) (ECF No. 66) (attaching "The Court's Final Ruling on Claim Construction (*Markman*) Hearing," but also ordering further meet and confer on subject).
1015	Civil Minutes re Telephonic Markman Hearing, *Ancora Techs., Inc. v. TCT Mobile (US), Inc.*, No. 8:19-cv-02192 (C.D. Cal. Nov. 19, 2020) (ECF No. 69) (confirming no change to "The Court's Final Ruling on Claim Construction (*Markman*) Hearing").
1016	Decision Granting Institution of Inter Partes Review, TCT Mobile (US) Inc. v. *Ancora Technologies, Inc.*, No. IPR2020-01609 (Feb. 16, 2021) (Paper No. 7) ("TCL Institution Decision").
1017	Decision Granting Institution of Inter Partes Review, *Sony Mobile Commc'ns AB v. Ancora Technologies, Inc.*, No.

	IPR2021-00663 (June 10, 2021) (Paper No. 17) ("Sony Institution Decision").
1018	Board Email Authorizing Motion For Additional Discovery, May 27, 2022
1019 – 1032	RESERVED
1033	Declaration of Andrew Wolfe, Ph.D., in Support of Petitioners' Reply to Patent Owner's Response
1034	Transcript of the Deposition of Miki Mullor, July 12, 2022 (Confidential)
1035	Transcript of the Deposition of David Martin, Ph.D., July 14, 2022
1036	RESERVED
1037	Denon DP-35F/DP-45F Instruction Manual, Nippon Columbia Co., Ltd.
1038	Excerpts from *Dictionary of Computing*, 4th ed., Oxford University Press, 1996
1039	U.S. Patent No. 5,568,552 to Davis
1040	Guttman, B., et al., *Computer Security*, National Institute of Standards and Technology, 1995)
1041	Kaliski, B., "PKCS #1: RSA Encryption," RFC 2313, The Internet Society, Network Working Group, March 1998
1042	U.S. Patent No. 5,724,425 to Chang et al.
1043	U.S. Patent No. 5,935,246 to Benson
1044 – 1049	RESERVED
1050	LG Settlement and License Agreement (Confidential)
1051	TCL Settlement and License Agreement (Confidential)
1052	Sony Settlement and License Agreement (Confidential)
1053	Microsoft Settlement and License Agreement (Confidential)
1054	Lenovo Settlement and License Agreement (Confidential)
1055	Toshiba Settlement and License Agreement (Confidential)
1056	Dell Settlement and License Agreement (Confidential)
1057	HP Settlement and License Agreement (Confidential)
1058 – 1069	RESERVED
1070	Opening Claim Construction Brief, *Ancora Techs., Inc. v. LG Electronics Inc. et al.*, No. 1:20-cv-00034 (W.D. Tex. April 9, 2020) (ECF No. 47)
1071	Responsive Claim Construction Brief, *Ancora Techs., Inc. v. LG Electronics Inc. et al.*, No. 1:20-cv-00034 (W.D. Tex. April 10, 2020) (ECF No. 50)

1072	Reply Claim Construction Brief, *Ancora Techs., Inc. v. LG Electronics Inc. et al.*, No. 1:20-cv-00034 (W.D. Tex. April 27, 2020) (ECF No. 53)
1073	Opening *Markman* Brief, *Ancora Techs., Inc. v. HTC America, Inc. et al.*, No. 2:16-cv-01919-RAJ (W.D. Washington September 23, 2019) (ECF No. 59)
1074	Ancora Technologies, Inc.' Responsive *Markman* Brief, *Ancora Techs., Inc. v. HTC America, Inc. et al.*, No. 2:16-cv-01919-RAJ (W.D. Washington October 7, 2019) (ECF No. 62)
1075	Ancora Technologies, Inc.'s Disclosure Of Extrinsic Evidence; *Ancora Techs., Inc. v. Google, Inc. et al*., No. 6:21-cv-00735, 0737, 00738 (W.D. Tex. January 13, 2022)
1076	Complaint for Patent Infringement, *Ancora Techs., Inc. v. Nintendo Co., Ltd. et al.*, No. 6:21-cv-00738 (W.D. Tex. July 16, 2021)
1077	Complaint for Patent Infringement, *Ancora Techs., Inc. v. Roku, Inc.*, No. 6:21-cv-00737 (W.D. Tex. July 16, 2021)
2001	Microsoft Corporation's Request for *Ex Parte* Reexamination Image File Wrapper, Control No. 90010560
2002	*Ancora Techs., Inc. v. Apple, Inc.*, 744 F.3d 732 (Fed. Cir. 2014)
2003	Deposition Excerpts of Jon Weissman, *Ancora Techs., Inc. v. HTC America, Inc.*, Case No. 2:16-cv-01919 (W.D. Wa. Sep. 9, 2019)
2004	Declaration of Ian Jestice, *Ancora Techs., Inc. v. HTC America, Inc.*, Case No. 2:16-cv-01919 (W.D. Wa. Aug. 26, 2019)
2005	Brief of Appellees HTC America, Inc. and HTC Corporation, *Ancora Techs., Inc. v. HTC America, Inc., HTC Corp.*, Case No. 18-1404 (Fed. Cir. Apr. 23, 2018)
2006	Declaration of Jon Weissman, *Ancora Techs., Inc. v. HTC America, Inc.*, Case No. 2:16-cv-01919 (W.D. Wa. Sep. 4, 2019)
2007	Terplan, Kornel, Morreale, Patricia, THE TELECOMMUNICATIONS HANDBOOK, CRC Press, 2000
2008	COMPUTER USER'S DICTIONARY, Microsoft Press, 1998
2009	MICROSOFT COMPUTER DICTIONARY FOURTH EDITION, Microsoft Press,1999
2010	PC MAGAZINE ENCYCLOPEDIA, available at https://www.pcmag.com/encyclopedia (excerpt, definition of "Agent")

2011	U.S. Patent No. 6,411,941 File History with Beeble White Paper
2012	Joint Claim Construction Chart, *Ancora Techs., Inc. v. TCT Mobile (US) Inc., Huizhou TCL Mobile Commc'n Co., Ltd., and Shenzhen TCL Creative Cloud Tech. Co., Ltd.*, Case No. 8:19-cv-02192 (Dkt. #49, 49-1, 49-2)
2013	Declaration of Dr. David Martin, Ph.D., *Sony Mobile Commc'ns AB, Sony Mobile Commc'ns, Inc., Sony Elecs. Inc., and Sony Corp. v. Ancora Techs., Inc.*, IPR2021-00663, Ex. 2015 (PTAB Apr. 23, 2021)
2014	U.S. Patent No. 6,189,146 (Misra)
2015	U.S. Patent No. 5,479,639 (Ewertz)
2016	Decision Denying Institution of Inter Partes Review, *Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. v. Ancora Technologies, Inc.*, IPR2020-01184
2017	Declaration of Ian Jestice, *Ancora Technologies Inc. v. LG Electronics Inc., LG Electronics U.S.A. Inc., Samsung Electronics Co., Ltd., and Samsung Electronics America, Inc.*, Case No. 1:20-cv-00034 (Dkt. # 44-8)
2018	Declaration of Dr. David Martin (May 3, 2022)
2019	U.S. Patent No. 5,892,900 (Ginter)
2020	U.S. Patent No. 5,734,819 (Lewis)
2021	U.S. Patent No. 6,153,835 (Schwartz)
2022	*Ancora Techs. Inc. v. Apple, inc.*, Case No. 4:11-cv-06357 (Dkt. # 171-3) [Apple Inc.'s N.D. Cal. L.R. 3-3 (Invalidity) Disclosures]
2023	Petition, *HTC Corp. v. Ancora Techs. Inc.*, Case No. CBM2017-00054, Paper 1 (PTAB May 26, 2017)
2024	Institution Decision, *HTC Corp. v. Ancora Techs. Inc.*, Case No. CBM2017-00054, Paper 7 (PTAB Dec. 1, 2017)
2025	Croucher, "The BIOS Companion" (1997) (Excerpts)
2026	Transcript of Deposition of Dr. Andrew Wolfe (April 22, 2022)
2027	Joint News Release (February 14, 2005)
2028	March 25, 2022 Email from Board regarding IPR2021-01338 and IPR2021-01406
2029	[redacted] (Confidential)
2030	Declaration of Miki Mullor
2031	[redacted] (Confidential)
2032	[redacted] (Confidential)
2033	Reserved

2034	Reserved
2035	AIPLA statistics
2036	Reserved
2037	[redacted] (Confidential)
2038	Proposed Protective Order
2039	Redline Relative To Standard Protective Order
2040	Reserved
2041	Reserved
2042	Barron's Dictionary of Computing and Internet Terms (5th Ed. 1996)
2043	Decision Granting Institution, Case No. IPR2020-01609, Paper 7 (PTAB Feb. 16, 2021)
2044	Free On-Line Dictionary of Computing (June 6, 1999), available at http://foldoc.org/bios
2045	U.S. Patent No. 5,684,951 (Goldman)
2046	Paul C. Kocher, *Timing Attacks on Implementations of Diffie-Hellman, RSA, DSS, and Other Systems*, Proceedings of 16th Annual Int'l Cryptology Conf. (Aug. 18–22, 1996)
2047	Ancora's Patent Owner Preliminary Response, *Sony Mobile Communications AB v. Ancora Techs., Inc.*, Case No. IPR2021-0063, Paper 13 (PTAB Apr. 23, 2021)
2048	[redacted] (Confidential)
2049	[redacted] (Confidential)
2050	[redacted] (Confidential)
2051	[redacted] (Confidential)

I. INTRODUCTION

The Board should ignore Petitioner's desperate and inflammatory attempts to distract from the weaknesses in the asserted grounds. For example, Petitioner's plain-meaning claim construction arguments—asserting the claimed agent should not be limited to software—rely on evidence that is divorced from the context of the '941 patent.

The Reply then relies on a series of improper, hindsight-biased arguments and assumptions relating to Hellman and Chou. Petitioner's arguments cannot and do not overcome the differences cited in Ancora's Response. Specifically, Hellman never mentions BIOS or any operating system and does not disclose a BIOS EEPROM. Taken together, Hellman and Chou do not disclose an OS-level software program or routine for setting up a verification structure, which was the differentiator that the applicants ***and the examiner*** cited during prosecution of the '941 patent.

Lastly, the Reply attempts to impugn Ancora and its settlement agreements. Petitioner offers no legal basis for its theory that [redacted].

II. CLAIM CONSTRUCTION

A. The Plain Meaning of "Agent" Excludes Hardware in the Context of the '941 Patent

The plain meaning of "agent" requires "a software program or routine." (*See* POR 33.) Multiple technical dictionaries, relied on by Ancora's expert Dr. Martin, require this meaning. (*See* Ex. 2018 ¶¶126, 133; Ex. 2007 at 2–11; Ex. 2008 at 13; Ex. 2009 at 18–19; Ex. 2010 at 1.) Defying these dictionary definitions and the courts that have found otherwise (*see* POR 33), Petitioner argues that the claimed agent can include hardware—relying on a dictionary definition that relates to "robots" and a patent that discloses a unique "hardware agent." (Reply 15–16.)

Petitioner relies on the Oxford Dictionary of Computing, which explicitly explains that a "robot (*see* robotics) is an example of an agent that perceives its physical environment through sensors and acts through effectors." (Ex. 1038 at 4.) The definition does not identify any other agent comprising "hardware." (*Id.*) The definition is inconsistent with the '941 patent and should not be relied upon. *See Ideal Instruments, Inc. v. Rivard Instruments, Inc.*, 498 F. Supp. 2d 1131, 1153 (Fed. Cir. 2007) ("the court must choose the proper dictionary definition in light of the 'intrinsic' evidence of the meaning of patent terms"). The use of special hardware in the agent would be anathema to the '941 patent, which specifically distinguishes prior art hardware-based products. (Ex. 1001 1:27–35; Ex. 2018 ¶61 ("the '941

patent discloses using ***existing*** computer hardware with 'a ***conventional*** BIOS module . . . .'") (emphasis added).)

The Davis patent (Ex. 1039) cited by Petitioner's expert likewise does not establish that "agent" is ***normally*** understood to include hardware. Davis does not disclose a single instance where the unmodified word "agent" is used to describe a hardware-based agent. (*See*, *e.g.*, Ex. 1039 8:55–9:12.) Instead, Davis consistently uses "hardware agent" as shorthand to describe an integrated circuit component. (*Id.* 3:1–10.) Further, usage in a patent does not necessarily indicate a word's plain meaning because it is well known that patentees are free to act—even by implication—as their own lexicographers. *See Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004).

B. Construing "Agent" as Software-Only Is Consistent with its Plain Meaning and the Disclosure of the '941 Patent

The Reply argues that the '941 patent cannot support construing "agent" as software-only, relying upon alleged lack of "support." (Reply 15–16.) The Board has no authority to consider written description arguments as part of Petitioner's grounds here. *Straight Path IP Group, Inc. v. Sipnet EU S.R.O.*, 806 F.3d 1356, 1363 (Fed. Cir. 2015); *see* 35 U.S.C. § 311(b) (petitions are limited to grounds "that could be raised under section 102 or 103"). *Novartis* does not hold otherwise. *See Novartis Pharma. v. Accord Healthcare Inc.*, 38 F.4th 1013, 1015 (Fed. Cir. 2022). The issue there was whether the ***district court*** correctly found written description support for

an express negative limitation added during prosecution. *Id.* at 1018–19. On the merits, *Novartis* explained that adequate written description exists for a negative claim limitation when the specification "distinguishes among" the element and alternatives to it. *Id.* at 1016–17 (citing *Inphi Corp. v. Netlist, Inc.*, 805 F.3d 1350, 1357 (Fed. Cir. 2015)). Here, the '941 patent distinguishes prior art solutions that required added hardware (Ex. 1001 1:27–35) and it describes the use of E^2PROM manipulation ***commands*** (software) used to write data to effect setting up a license record (*id.* 2:2–5). These disclosures provide the needed support for a software-only agent. *See Inphi*, 805 F.3d at 1357.

The Reply alternatively contends the Board previously concluded it was error to construe "agent" as software only. (Reply at 15.) But the cited decision makes clear that the Board merely declined to decide the issue at the institution stage of that case. (Ex. 1017 at 28 ("At this stage, we decline . . . .").) Further, Ancora's arguments in the Sony IPR are not an admission that the plain meaning of agent, in the context of the '941 patent, includes hardware. (Ex. 2047 at 28–34.) To the contrary, Ancora distinguished "an agent comprised entirely of specialized hardware" from the agent claimed in the '941 patent. (*Id*.)

Lastly, the Reply argues that construing the claimed agent to exclude hardware would make the scope of the claims an "arbitrary line-drawing exercise," citing Dr. Martin's testimony. (Reply 16 (citing Ex. 1035 117:7–123:10.) Dr. Martin

repeatedly testified that, for example "I don't see how something that is known to be hardware could satisfy the constraint of actually being software." (Ex. 1035 118:17–119:9; *also id.* 122:12–22.) Petitioner takes issue with Dr. Martin's testimony that "it may be possible to analyze the software component without the hardware, but it depends on the specific circumstance." (*Id.* 123:6–10.) But Petitioner fails to cite later testimony in which Dr. Martin explains that hardware may act "in service of" the agent. (*Id.* 129:9–132:2.) This is not an arbitrary analysis. The claimed agent requires software to provide the logic that controls the "setting up" step—not hardware.

C. Ancora's Interpretation of "Agent" is Not Inconsistent with Positions it Adopted in Related District Court Cases

Ancora has never opposed a construction requiring "agent" to be an "***OS level*** software program or routine." Petitioner cites cases in which Ancora argued for the plain meaning of "agent," but Ancora was opposing defendants' means-plus-function arguments. (*See* Ex. 1070 at 17 ("the parties' dispute regarding this term is whether 'agent' is a nonce word"); Ex. 1071 at 2; Ex. 1073 at 12–19; Ex. 1074 at 6–7; Ex. 1075 at 3.)

Defendants in prior district court proceedings could have argued that "agent" should be limited to the narrower "***OS level*** software routine or program" asserted here. Certainly, they would have asserted this narrower construction of "agent" if it could have helped their case. In fact, LG and Samsung argued that the prosecution

history required the "verifying" and "acting on" steps to be performed by an OS level application. (*See* Ex. 1070 at 22 & 26.) There, Ancora distinguished arguments relating to the claimed agent in the "setting up step" from the subsequent "verifying" and "acting on" steps. (*See* Ex. 1071 at 17.) Specifically, the examiner's reasons for allowance did not amount to a disavowal with respect to the "verifying" and "acting on" steps because context suggested "the OS-level 'agent' is required only to 'set up a verification structure in the erasable, non-volatile memory of the BIOS.'" (*Id*. at 18.) The district court agreed. (Ex. 1012 at 4.)

Throughout claim construction briefing in the Samsung and LG cases, Ancora noted that the claimed "agent" is OS-level. (*See* Ex. 1070 at 2, 14, & 23; Ex. 1071 at 5, 15–16, & 17–19; Ex. 1072 at 6 & 12–14.) Specifically, Ancora argued that "where the patentee intended that an OS-level program or application participate in a particular step, it amended the claims to say so specifically by adding the term 'agent.'" (Ex. 1070 at 23; *see also id.* at 24 & 26; Ex. 1071 at 17–19.) Ancora similarly argued that "the 'setting up' step requires the involvement of an OS-level software program or routine (i.e. an agent)." (Ex. 1072 at 12; *see also id.* at 13–14.) In short, Ancora's Response is consistent with arguments from the Samsung and LG cases.

Finally, applying prosecution history disclaimer here does not unfairly prejudice Petitioner. In the district court, "statements made by a patent owner during

an IPR proceeding, whether before or after an institution decision, can be considered for claim construction and relied upon to support a finding of prosecution disclaimer." *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1362 (Fed. Cir. 2017).

D. "Agent" Is Properly Interpreted to Require an OS-Level Software Program or Routine in View of the '941 File History

As discussed in the Response, disavowal of claim scope can be shown by the applicant's actions during prosecution of a patent, particularly when the examiner accedes to the applicant's position. (POR 31–32 (citing *Rembrandt Wireless Techs., LP v. Samsung Elecs. Co., Ltd.*, 853 F.3d 1370, 1376 (Fed. Cir. 2017); *Kaken Pharma. Co., Ltd. v. Iancu*, 952 F.3d 1346, 1354 (Fed. Cir. 2020).) The Reply does not discuss the references distinguished by the applicants during prosecution of the '941 patent and does not contradict the way the Response characterized those references. (*See* POR 12–14 (Misra), 14–16 (Ewertz), 34 (applicants' remarks).)

The *MIT* case cited in the Reply is factually differentiable because the defendant in that case did not cite ***any*** prosecution history that addressed the disputed limitation. *Mass. Inst. of Tech. v. Shire Pharms., Inc.*, 839 F.3d 1111, 1120–22 (Fed. Cir. 2016). Consequently, defendant failed to demonstrate "clear and unmistakable" disclaimer as required by law. *Id.* at 1122.

Here, as discussed in Ancora's Response, both the applicants and the examiner entered remarks that require a narrower interpretation of "agent." (POR

34–35.) The remarks in applicants' February 5, 2002 amendment were clearly and unmistakably aimed at the function of the claimed agent—not the "selecting," "verifying," or "acting on" steps recited in the claims. Applicant argued that the cited references "do not teach or suggest, among other things, ***storing a verification structure***, such as a software license information, in the BIOS of a computer as is recited in the present claim." (Ex. 2011 at ANCC000151 (emphasis added).) Applicant secondly argued that there was no motivation to combine the cited references because "BIOS and OS level programs are normally mutually exclusive," making it undesirable to combine the BIOS routines in Ewertz with Misra's OS level ***license generator***. (*Id.* at ANCC000153–54 (emphasis added).) Third, applicant argued that the invention proceeded against conventional wisdom in the art because "[t]here is no OS support whatsoever to ***write*** data to the system BIOS" and because the lack of a file system associated with the BIOS "is further evidence that OS level application programmers would not consider the BIOS as a ***storage medium*** for license data." (*Id.* at ANCC000154 (emphasis added).) Fourth, applicant argued that "it is clear that Misra teaches away from using the BIOS as a local ***storage area*** for licenses." (*Id.* at ANCC000155 (emphasis added).)

The fact that the word "agent" is unstated in the February 5, 2022 amendment does not change the thrust of applicant's arguments. After filing that amendment, applicants interviewed the examiner and agreed to further amend claim 20 (claim 18

in the ’941 patent) to add “agent.” (*Id.* at ANCC000160 (noting interview on Feb. 19, 2002).)

The Reply mischaracterizes Ancora’s claim construction argument as relying “on a single office action response.” (Reply 4.) As noted in Ancora’s Response (POR 34–35), the examiner’s reasons for allowance explained that the cited references “do not teach licensed programs running at the OS level ***interacting with a program verification structure*** stored in the BIOS” and that “a computer BIOS is not setup to ***manage*** a software license verification structure.” (Ex. 2011 at ANCC000162 (emphasis added).) The examiner further stated that “[t]he present invention overcomes this difficulty by ***using an agent to set up a verification structure*** in the erasable, non-volatile memory of the BIOS.” (*Id.*) Taken as a whole, the examiner’s statement clearly and unmistakably refers to the claimed agent.

The Board should reject Petitioner’s attempt to pin the “OS-level” limitation imposed by the prosecution history on straw-man “verifying software.” (*See* Reply 6–7.) “Verifying software” is not expressly recited in any claim in the ’941 patent, as Petitioner acknowledges. (Reply 6.) And the Reply fails to identify a single instance where “verifying software” appears in the written description or the file history—in fact it does not. (*See* Ex. 1001; Ex. 2011.) As discussed in Ancora’s Response, the Federal Circuit used “verifying software” as shorthand to distinguish “to-be-verified software” when discussing claim construction arguments related to

the "to-be-verified software." (POR 35–36.) Further, the prosecution history explicitly contradicts Petitioner's argument that only the "verifying software" must be OS-level. As emphasized above, the examiner noted that the Claim 1 embodiment overcame the art "by using an ***agent*** to set up a verification structure." (Ex. 2011 at ANCC000162 (emphasis added).) The examiner likewise noted that the independent claim 20 (claim 18 in the '941 patent) embodiment overcame the prior art "by utilizing an ***agent*** to verify the application software program using the license information stored in the erasable, writable, non-volatile memory of the BIOS." (*Id.* at ANCC000163 (emphasis added); *see also* Ex. 1071 at 17–18.)

Even if the examiner's remarks related only to "verifying software," Petitioner has not identified any reason why the remarks do not ***also*** require the agent used by the verifying software to be OS-level. As discussed above, the examiner's remarks explicitly discuss the agent in the context of setting up a verification structure. (Ex. 2011 at ANCC000162–63.) Requiring an OS level agent also comports with the disclosure of the '941 patent. Dr. Martin's uncontradicted testimony establishes that the E^2PROM manipulation commands disclosed in the '941 patent describe OS-level activity. (Ex. 1035 136:8–138:17; *see* Ex. 1001 1:65–2:9.)

E. The Meaning of "OS-Level" Is Reasonably Certain

The Reply includes over three pages of red-herring arguments about whether the meaning of "OS level" is sufficiently clear, including a laundry list of instances

where Ancora's Response, Dr. Martin, the examiner, or the applicants used the term "OS level." (Reply 7–11.) But "absolute precision is unattainable" in patented claims. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014) (claims will not be found indefinite unless they fail to "inform those skilled in the art about the scope of the invention with reasonable certainty"). Further, Petitioner does not identify any conflicts or logical inconsistencies in the way OS level has been described. (*See* Reply 7–11.) Dr. Wolfe, allegedly applying the knowledge of one skilled in the art, evaluates Hellman under the "varying criteria" articulated by Dr. Martin. (Ex. 1033 ¶¶27–41.) And neither Petitioner nor Dr. Wolfe assert the outcome will change based on the allegedly different ways that OS level has been described. In short, the exact meaning of OS level is a non-issue.

I. NEITHER HELLMAN NOR CHOU NOR THE ALLEGED COMBINATION DISCLOSES USING AN AGENT TO SET UP A VERIFICATION STRUCTURE IN THE ERASABLE, NON-VOLATILE MEMORY OF THE BIOS

The crux of the asserted Grounds is that Hellman—which does not disclose a BIOS, an operating system, or any software routine or program (OS level or otherwise) that sets up a verification structure in the memory of the BIOS—would have rendered the claims obvious in view of Chou. The Petition and Institution Decision assert that Chou teaches storing sensitive information in the BIOS EEPROM to reduce the risk of ***tampering*** with that information. (*E.g.*, Pet. 32; ID 16–17 & 26.) But Chou teaches, at most, a means for password protection that cannot

be defeated by removing CMOS RAM power. (POR 52–53; Ex. 2018 ¶¶191–92.) Backpedaling, Petitioner's Reply argues Chou discloses that "any attempt to modify or delete the sensitive information would result in disabling the boot process of the computer." (Reply 20 (citing Ex. 1005 1:63–2:7).) At most, however, Chou discloses an attack that deleted data stored in CMOS RAM on prior art devices, by removing power from the RAM. (Ex. 1005 1:54–62.) Chou's design beneficially stores data in ***non-volatile*** EEPROM that happens also to store the BIOS. Chou does not contemplate any other type of attack that could delete its password information and does not disclose any attack that would ***modify*** password information. Further, Chou discloses only storing a password for use by BIOS routines that run at ***startup***; including SETUP mode 105. (*Id.* 8:42–61, FIG. 10.) Petitioner attempts to fill the gaps in the express disclosures of Hellman and Chou with a series of improper hindsight arguments that follow the roadmap provided by '941 patent's claims, as discussed below.

A. Hellman Discloses Hardware Used to Store License Records In an EEPROM, and Replacing Hellman's Hardware with Software Would Not Have Been Obvious

The Reply falsely argues that Dr. Martin did not respond to arguments that Hellman "already disclosed a software implementation." (Reply 17.) Both Dr. Martin and the Response explained why Hellman's update unit 36 must be understood as hardware. (Ex. 2018 ¶¶164–71; POR 60.) Further, Dr. Wolfe

conceded that Hellman does not teach software. (POR 60 (citing Ex. 1003 ¶¶137 & 138A).) The fact that "the activities performed by update unit 36 ***could be*** performed in either hardware or software" remains an improper obviousness argument. (POR 60–61 (addressing the equivocal statements in Ex. 1003 ¶¶137A–137B).) Dr. Wolfe's new reply declaration similarly relies on a series of obviousness arguments. (Ex. 1033 ¶¶17–18.) He argues, for example that Hellman's update unit 36 "***would have been*** implemented by a software routine"—not that it ***was*** so implemented. (*Id.* ¶17.) Similarly, he argues that Hellman's verification process is "***suitable for*** software implementation." (*Id.* ¶18.) None of these new arguments establish that Hellman expressly or inherently disclose a software implementation of the update unit 36. Dr. Wolfe cross-cites his own declaration and deposition testimony, but offers no other evidence to support these obviousness arguments. (*Id.* ¶¶17–18.)

Even in Hellman's computer embodiment, Dr. Wolfe's professed motivations are counterbalanced by reasons that would discourage replacing hardware with software. (Ex. 2018 ¶¶174–75.) None of Dr. Wolfe's new arguments satisfy Petitioner's burden to articulate a non-hindsight reason for modifying Hellman. The fact that "any computer" includes "wires, switches, and glue" is irrelevant. (*See* Reply 18; Ex. 1033 ¶19.) The discussion here must focus on the reasons for replacing Hellman's switch 41, wire, and factory seals or paint—the ones used to prevent users from accessing Hellman's hardware-based license management system. Likewise,

existence of software in a record player or a computer embodiment does not mean that the ordinarily skilled artisan would have replaced Hellman's hardware solution with software. And lastly, Dr. Wolfe concedes that the risk of software security vulnerabilities could not be eliminated—only reduced. (Ex. 1033 ¶¶22–25.)

B. Hellman Does Not Disclose Any Operating System, Nor Would the Asserted Combination Render the Claimed Agent Obvious

Petitioner argues that it would have been obvious in view of Hellman's and Chou's teachings to replace Hellman's hardware with ***OS level*** software programs or routines to write Hellman's value "M" into Chou's BIOS memory EEPROM. As a first matter, this proposed combination is directly analogous to the art that applicants overcame during prosecution. Hellman (POR 37–43; Ex. 1004) is to Ginter (POR 8–9; Ex. 2019) and/or Misra (POR 12–14; Ex. 2014) as Chou (POR 43–46; Ex. 1005) is to Ewertz (POR 14–16). Neither the Reply nor Dr. Wolfe challenges Ancora's characterization of these references. (*See* Reply; Ex. 1033.) Like the art cited during prosecution, Hellman and Chou "singly or collectively, do not teach licensed programs running at the OS level interacting with a program verification structure stored in the BIOS to verify the program using the verification structure and having a user act on the program according to the verification." (*See* POR 19 (quoting Ex. 2011 ANCC000162).)

Hellman does not disclose any specific software that would have been understood to operate at the OS level, unlike the '941 patent. The Reply and Dr.

Wolfe leap from Hellman's disclosure of a "software package 17" (e.g., a computer program) that runs on a "software player 42" (e.g., a microprocessor or central processing unit (CPU)) to conclude that "base unit 12 has an operating system on which the computer program (i.e. software package 17) runs." (Reply 11 (citing Ex. 1033 ¶¶27–30).) Dr. Wolfe assumes that Hellman's computer would necessarily be a ***general purpose desktop computer*** like an ordinary ***PC*** such that it would have an operating system. (Ex. 1033 ¶28.) He offers no basis for these logical leaps. Dr. Wolfe equivocated at his deposition, where he testified that "[t]here were certainly things that ran an ordinary Intel microprocessor on an ordinary Intel mother board that did not run an operating system" and further that "there are all kinds of computers for home use." (Ex. 2026 33:7–25.) Nevertheless, his reply declaration relies on his own testimony that he "would assume" a computer has an operating system. (Ex. 1033 ¶28 (quoting testimony at Ex. 2026 31:24–25).) Likewise, Dr. Wolfe argues Hellman's software player 42 illustrates "operating system resources," analogizing to Dr. Martin's testimony about the '941 patent. (Ex. 1033 ¶30.) Dr. Martin's testimony identified the '941 patent's disclosure of Lotus 1-2-3 software, which he recognized as running on an operating system. (Ex. 1035 98:4–99:7, 102:20–103:8, 105:11–106:11.) Dr. Wolfe has no such evidence for Hellman.

Even if one assumes that Hellman disclosed a general purpose desktop computer or PC, with an operating system, and even if one further assumes the

software player 42 is a microprocessor, neither Petitioner nor Dr. Wolfe offer any basis for assuming that software package 17 is OS level software. Neither Hellman nor Chou motivates or otherwise discloses a reason for applying Hellman's disclosure to verify software running at the OS level. In Chou, the verification is performed "before the computer BIOS routines can be completely executed." (Ex. 1005 Abstract; *see also id.* 3:60–62, 4:1–5 ("If the user is not verified as authorized, the BIOS routines will not be completely executed, rendering the computer inoperative").) This comports with Hellman's disclosures that update unit 36 either sends or does not send a control signal such that switch 41 "***activates*** software player 42." (Ex. 1004 10:44–54.)

Alternatively, Petitioner and Dr. Wolfe argue without supporting evidence that Hellman discloses an OS-level agent because Hellman's update unit 36 is "capable of being used by an OS-level 'verifying software' and capable of writing to the BIOS memory." (Reply 13 (citing Ex. 1033 ¶¶30–31).) Dr. Wolfe assumes first that Hellman's update unit 36 is implemented as software. (Ex. 1033 ¶30.) This assumption relies on his improper, equivocal argument that update unit 36 ***could be*** performed in software. (POR 60–61.) Dr. Wolfe next assumes the update unit 36 runs a computer with an operating system. As discussed above, he has no basis for this assumption. Further, Petitioner's argument that Dr. Wolfe's assumptions render the update unit 36 "***capable of*** being used by the OS-level 'verifying software'" is

not a proper obviousness argument. *See Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 993–94 (Fed. Cir. 2017).

Petitioner's remaining arguments are similarly without merit, relying on unsupported assumptions and farcical logic. (*See* Reply 13–14.) First, Petitioner argues that the update unit 36 runs "separate from the BIOS" because Hellman does not disclose a BIOS. (*Id.* at 13.) But logically distinguishing the OS level from the BIOS requires a computer with ***both*** a BIOS and an operating system. Hellman does not disclose a BIOS, as Petitioner points out, and Hellman does not disclose an operating system for all of the reasons discussed above.

Second, Petitioner argues that a user's attempt to run software package 17 would happen only "after the BIOS setup has completed." (*Id.* at 13–14.) This logic works only if Hellman's system is assumed to have an operating system ***and*** if Hellman's software package 17 is assumed to be OS-level software. As discussed above, neither Petitioner nor Dr. Wolfe offers any basis for this assumption.

Third, Petitioner argues that, if Hellman's base unit 12 includes an operating system, the update unit 36 would necessarily run "through an OS." (*Id.* at 14.) As discussed above, neither Petitioner nor Dr. Wolfe offers any basis for assuming Hellman's system would run at the OS level, and not within the BIOS.

C. The Reply Does Not Redeem Petitioner's Failed Motivation to Combine Arguments

Ancora's Response identified flaws in each of Petitioner's reasons to combine (POR 52–54). The Reply offers four rejoinders, addressed below.

First, as discussed above, Petitioner offers no evidence that Chou discloses a "risk of disabling the entire computer" as a result of tampering. The Reply cites conclusory portions of Dr. Wolfe's analysis that ultimately rely on a single passage from Chou (Ex. 1005 1:63–2:7) that does not support this contention. (*See* Reply 20–21 (citing Ex. 1003 ¶115; Ex. 1033 ¶56).)

Second, while Hellman discloses a single EEPROM chip, this does not establish that the modified Hellman would use only a single, combined EEPROM—particularly if BIOS routines and data were to be added to the existing information in Hellman's EEPROM memory. And Dr. Wolfe's declaration undisputedly allows for "less than five" EEPROM modules in a computer. (Reply 21; Ex. 1003 ¶114.) This allows for the addition of at least one extra EEPROM for storing BIOS routines and data in Hellman's single EEPROM device.

Third, although the Reply argues that a POSA would have been motivated to reduce the overall cost of the implementation (Reply 21), it does not address Schneck's teachings regarding the benefits of a separate hardware-protected access mechanism (*see* POR 54; Ex. 1006 15:51–63).

Fourth, the Reply argues that Ancora relies on a waived claim construction argument. (Reply 22.) Ancora's Response stands for itself. (POR 55 (citing Ex. 2016 at 26; Ex. 2001 at 163–64).) To the extent the Board now believes construction of "memory of the BIOS" is necessary, it can take judicial notice of Federal Circuit's decision in *Ancora Techs., Inc. v. Apple, Inc.*, 744 F.3d 732 (Fed. Cir. 2014). At bottom, the Reply fails to identify any portion of the Petition that asserted Hellman's license values M would have been stored within Chou's BIOS as incorporated into Hellman's EEPROM. Petitioner's attempt to add arguments through the Reply about "Chou's explicit disclosure" is improper and untimely. *See* 37 C.F.R. § 42.23. Lastly, the Reply mischaracterizes Ancora's Response as requiring the BIOS program to continue to use the portion of memory allocated to the verification structure. (Reply 22–23.) Ancora's Response noted the Petition's failure to describe any reason for storing Hellman's "M" in the memory area of the BIOS, as opposed to a separate portion of Hellman's existing EEPROM. (POR 55–56.)

D. Petitioner's Supplemental "Verification Structure" Arguments Did Not Appear in the Petition or the Supporting Wolfe Declaration

The Reply relies on a new theory that Hellman disclosed a "table" stored in non-volatile memory 37, rather than the "memory structure" of non-volatile memory 37. (*Compare* Pet. 41 *with* Reply 19.) In support, the reply cites six paragraphs of supplemental declaration testimony from Dr. Wolfe. (Reply 18–19

(citing Ex. 1033 ¶42–47).) The Board should restrict Petitioner to the theories raised in the Petition. *See* 37 C.F.R. § 42.23.

II. PETITIONER'S MODIFIED HELLMAN, ASSERTED AGAINST DEPENDENT CLAIMS 3, 8, 9, AND 14, RELIES ON THE '941 PATENT AS THE ROADMAP FOR SELECTING A SINGLE SPECIFIC EMBODIMENT IN A PARTICULAR WAY

Petitioner's improper hindsight cannot support Ground 2, which is uniquely asserted against claims 3, 8, 9, and 14. Because Ancora identified the embodiments of Hellman that would be inoperable as modified, Petitioner now cherry-picks the single embodiment that ***could be*** so modified. (*See* Reply 23–24.) Petitioner's analysis creates an improper "mosaic" that attempts to recreate "a facsimile of the claimed invention." *Akzo N.V. v. United States ITC*, 808 F.2d 1471, 1481 (Fed. Cir. 1986).

As discussed in Ancora's Response, Hellman discloses many embodiments of the authorization A. (POR 64–65 ("one-way hash" versus "encrypted," and "limited use" versus "unlimited use").) The Petition did not distinguish among these embodiments except to note that storing the encrypted authorization A would be "***especially*** useful," and that a "POSA would have been ***especially*** motivated" when an unlimited number of uses was licensed. (Pet. 48 & 51.) The Reply now implicitly acknowledges that storing authorization A would ***only*** be useful in the unlimited use embodiment and only if not generated using a one-way hash. (Reply 23–24.) But neither Petitioner nor Dr. Wolfe offers a basis for selecting this embodiment, except

that it ***could work***. At most, Dr. Wolfe discusses the heightened risk associated with storing the special value indicating unlimited uses. (Ex. 1003 ¶143.) The Board must reject this rationale.

III. OBJECTIVE EVIDENCE OF NON-OBVIOUSNESS

A. The Joint Press Release Establishes Industry Praise

The Reply concedes that Exhibit 2027 was a ***joint*** press release between AMI and Ancora, making its authorship irrelevant. (*See* Reply 24.) The press release and the Alliance Agreement both explicitly and exclusively reference the '941 patent, making their nexus to the patent clear. (Ex. 2029 at 1; Ex. 2027.) Further, Mr. Mullor testified that AMI invested in the development of software under the Alliance Agreement, which embodied the '941 patent. (Ex. 1034 92:15–95:17; *see also id.* 51:22–53:2; 62:13–63:10.) This collective AMI evidence is indisputable evidence of industry recognition for the '941 patent.

B. Additional Settlement Agreements Show the Value of the '941 Patent

In response to the Board's order compelling Ancora to produce all of its license agreements (Paper 29), Ancora produced additional agreements including [redacted]. (Ex. 1050.) As with [redacted], described in the Response (POR 69–70), [redacted]. (Ex. 1050 at 4; *see* Ex. 2035 at 6–7.)

Like the [redacted] entered the agreement late in litigation (Ex. 1050 at 13–14), [redacted]. The '941 patent was the sole patent at issue, and [redacted].

C. Settlements for Less That the Cost of Litigation Have No Value When Evaluating Commercial Success of the '941 Patent

Petitioner makes much of prior IPR proceedings involving TCL and Sony, alleging that Ancora "knows that the Hellman/Chou combination is fatal to the challenged claims." (Reply 2.) Petitioners cite no caselaw finding that low-dollar license agreements can ***detract*** from an otherwise strong showing of objective indicia of non-obviousness. (*See* Reply 26.) The Federal Circuit has repeatedly held that settlements for less than the cost of litigation have no bearing on the obviousness analysis. *See Iron Grip Barbell Co. v. USA Sports, Inc.*, 392 F.3d 1317, 1324 (Fed. Cir. 2004); *Cole Kepro Int'l, LLC v. VSR Inds., Inc.*, 695 Fed. Appx. 566, 572 (Fed. Cir. 2017) (distinguishing "business decisions to avoid litigation, [] prior business relationships, or [] other economic reasons"); *cf. Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1353 (Fed. Cir. 2012) (crediting arguments that "large, sophisticated companies would not pay royalties

exceeding the cost of litigation if the royalty did not reflect the value of the licensed technology").

Petitioner has not cited any evidence showing that Ancora settled either the TCL or the Sony case for less than the maximum damages it could have recovered, subtracting litigation costs. Petitioner's counsel represented TCL, negotiated with Ancora's counsel, knows the value of damages in that case, and knows that Ancora cannot respond substantively without divulging confidential information from that case. The Board should not countenance Petitioner's attempt to hide behind the Sony and/or TCL protective orders.

Ancora's Response cites two licenses, and a third is described above, each entered late in litigation and substantially outstripping typical litigation expenses. (*See* POR 69–70.) [redacted] Further, Petitioner has not cited any precedent requiring the Board to compare amounts in dispute to the settlement amount when evaluating whether settlement agreements are evidence of strength in the challenged patent. (*See* Reply 25–26.) And in any event, Petitioner offers no evidence suggesting costs in those cases were abnormal.

Petitioner's irrelevant speculation and inuendo cannot overcome Ancora's black and white evidence showing the strength of the '941 patent.

IV. CONCLUSION

For the foregoing reasons, the Board should find the challenged claims of the '941 patent not invalid.

Respectfully submitted,
FITCH EVEN TABIN & FLANNERY LLP

Dated: August 29, 2022

By: /David A. Gosse/
David A. Gosse
Registration No. 61,511
dgosse@fitcheven.com

120 South LaSalle Street
Suite 2100
Chicago, Illinois 60603
(312) 577-7000
(312) 577-7007 (fax)

CERTIFICATE OF WORD COUNT

The undersigned hereby confirms that the foregoing Sur-Reply complies with the type-volume limitation of 37 C.F.R. § 42.24(c)(4). Excluding the items listed in 37 C.F.R. § 42.24(c) as not included in the word count, this patent owner sur-reply contains 5,570 words, calculated by the word-processing system used to prepare it.

Dated: August 29, 2022

By: /David A. Gosse/

David A. Gosse
Registration No. 61,511
dgosse@fitcheven.com

120 South LaSalle Street
Suite 2100
Chicago, Illinois 60603
(312) 577-7000
(312) 577-7007 (fax)

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on August 29, 2022, a complete and entire copy of the PATENT OWNER SUR-REPLY, was served via electronic mail to the attorneys listed below at PerkinsService-Nintendo-Ancora-IPR@perkinscoie.com:

Lead Counsel	**Back-up Counsel**
Jerry A. Riedinger Reg. No. 30,582 riedinger-ptab@perkinscoie.com Perkins Coie LLP	Jose Villarreal, Reg. No. 43,969 villarreal-ptab@perkinscoie.com Perkins Coie LLP Kyle Canavera, Reg. No. 72,167 canavera-ptab@perkinscoie.com Perkins Coie LLP Theresa H. Nguyen (*pro hac vice*) nguyen-ptab@perkinscoie.com Perkins Coie LLP Tara Kurtis, Reg. No. 74,846 kurtis-ptab@perkinscoie.com Perkins Coie LLP

Dated: August 29, 2022

By: /David A. Gosse/
David A. Gosse
Reg. No. 61,511
dgosse@fitcheven.com
Nicholas T. Peters
Reg. No. 53,456
ntpete@fitcheven.com
Karen J. Wang
Reg. No. 62,503
kwang@fitcheven.com
FITCH, EVEN, TABIN & FLANNERY LLP

120 South LaSalle Street, Suite 2100
Chicago, IL 60603
(312) 577-7000
(312) 577-7007 (fax)
Attorneys for Patent Owner