

**UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.**

**Before the Honorable Clark S. Cheney
Administrative Law Judge**

In the Matter of

**CERTAIN IP CAMERA SYSTEMS
INCLUDING VIDEO DOORBELLS AND
COMPONENTS THEREOF**

Investigation No. 337-TA-1242

RESPONDENTS' DISCLOSURE OF INVALIDITY CONTENTIONS

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I. INTRODUCTION

Pursuant to the schedule set forth in the Stipulation Among the Parties Concerning Certain Procedural and Discovery Matters filed on April 6, 2021, Respondents Vivint Smart Home, Inc. (“Vivint”), SimpliSafe, Inc. (“SimpliSafe”), and Arlo Technologies, Inc. (“Arlo”) (collectively, “Respondents”) hereby provide their initial invalidity contentions. Complainants SkyBell Technologies, Inc., SB IP Holdings, LLC and Eyetalk363, LLC (collectively, “Complainants”) have asserted the following patents and claims in this Investigation: (1) U.S. Patent No. 10,097,796 (“the ’796 patent”), claims 3 and 7; (2) U.S. Patent No. 10,200,660 (“the ’660 patent”), claims 9, 13, 14, 16, 18; (3) U.S. Patent No. 10,523,906 (“the ’906 patent”), claims 9, 13, 18; (4) U.S. Patent No. 10,097,797 (“the ’797 patent”), claims 6, 8, 9; (5) U.S. Patent No. 9,485,478 (“the ’478 patent”), claims 9-11, 17; (6) U.S. Patent No. 10,674,120 (“the ’120 patent”), claim 1; and (7) U.S. Patent No. 9,432,638 (“the ’638 patent”), claim 6 (collectively “the asserted patents”).

II. GENERAL RESERVATIONS

These invalidity contentions are provisional. Respondents reserve the right to revise or supplement these contentions in light of party and third-party discovery (such as expected device art expected from third-parties), Complainants’ infringement contentions, any claim construction order issued by the ALJ, review and analysis by expert witnesses, and further investigation and discovery regarding the defenses asserted by Respondents. For example, Respondents expressly reserve the right to amend these contentions after review of Complainants’ infringement contentions, after issuance of the claim construction order, in the event Complainants provide any information that they failed to provide in their disclosures, or if Complainants amend their disclosures in any way. Further, because discovery is ongoing, Respondents reserve the right to revise, amend, and/or supplement the information provided herein, including identifying, charting, and relying on additional references. Further, Respondents reserve the right to revise, amend, or

supplement when Complainants provide additional discovery. Further, Respondents reserve the right to revise their ultimate contentions concerning the invalidity of the asserted claims, which may change depending upon further and ongoing investigation, the construction of the asserted claims and/or positions that Complainants or expert witnesses may take concerning claim construction, infringement, and/or invalidity issues.

Prior art not included in this disclosure, whether known or not known to Respondents, may become relevant. In particular, Respondents are currently unaware of the extent, if any, to which Complainants will contend that limitations of the asserted claims are not disclosed in the prior art identified by Respondents. To the extent that such an issue arises, Respondents reserve the right to identify other references that would anticipate and/or render obvious the allegedly missing limitations of the claims. Respondents reserve the right to rely on any reference found in the prosecution histories of the applications leading to the asserted patents or otherwise identified in connection with this action, including in Respondents' Notice of Prior Art.

To the extent that the following contentions reflect constructions of claim limitations consistent with or implicit in Complainants' infringement allegations or proposed claim constructions, no inference is intended nor should any be drawn that Respondents agree with Complainants' infringement allegations or claim constructions, and Respondents expressly reserve the right to contest such allegations and claim constructions. Respondents offer such contentions in response to Complainants' infringement allegations and proposed claim constructions and without prejudice to any position that Respondents may ultimately take as to any claim construction issues. Specifically, Respondents base these invalidity contentions at least in part upon the claim scope and certain claim constructions that are implicitly or explicitly asserted by

Complainants, and nothing herein should be construed or represented as evidencing any express or implied agreement with any of Complainants' claim constructions or infringement positions.

Respondents intend to rely on admissions concerning the scope of the prior art relevant to the asserted patents found in, *inter alia*: the asserted patents and related patents and/or patent applications; the patent prosecution histories for the asserted patents and related patents and/or patent applications (including all prior art cited therein); any deposition testimony of the named inventor on the asserted patents and related patents and/or patent applications in this matter or any other matter; evidence and testimony relating to the level of skill in the art; and the papers filed and any evidence submitted by Complainants in connection with this matter.

Respondents' claim charts cite to particular teachings and disclosures of the prior art as applied to features of the asserted claims. However, persons having ordinary skill in the art generally may view an item of prior art in the context of other publications, literature, products, and understanding. As such, the cited portions are only examples, and Respondents reserve the right to rely on uncited portions of the prior art references and on other publications, expert testimony, and other evidence as aids in understanding and interpreting the cited portions, as providing context thereto, and as additional evidence that the prior art discloses a claim limitation or any of the asserted claims as a whole. Respondents further reserve the right to rely on uncited portions of the prior art references, other publications, and testimony, including expert testimony, to establish bases for combinations of certain cited references that render the asserted claims obvious.

The references discussed in the claim charts may disclose the elements of the asserted claims explicitly and/or inherently, and/or they may be relied upon to show the state of the art in the relevant timeframe. The suggested obviousness combinations are provided in addition to

and/or in the alternative to Respondents' anticipation contentions and are not to be construed to suggest that any reference included in the combinations is not by itself anticipatory.

The following discussion and exhibits provide exemplary prior art citations and obviousness positions. The citations and discussion in the charts are organized by claim (and claim limitation) for convenience, but each limitation or claim section applies to the larger context of each claim, to any related dependent or independent claims, as well as all claims containing similar limitations or elements. For example, citations as to any recited limitation, step, or component in the claims apply wherever each such limitation, step, or component is repeated elsewhere in the claim or patent. Where Respondents cite to a particular drawing or figure in the attached claim charts, the citation encompasses the description of the drawing or figure, as well as any text associated with the drawing or figure. Similarly, where Respondents cite to particular text concerning a drawing or figure, the citation encompasses that drawing or figure as well. Relatedly, certain portions of patent or other prior art disclosures build upon other disclosures, even if they are referred to as a separate or alternative embodiment. Thus, Respondents' citations to structures or functions incorporate by references all disclosures to related structures or functions, including any additional detail provided as to the operation or design of those structures or functions.

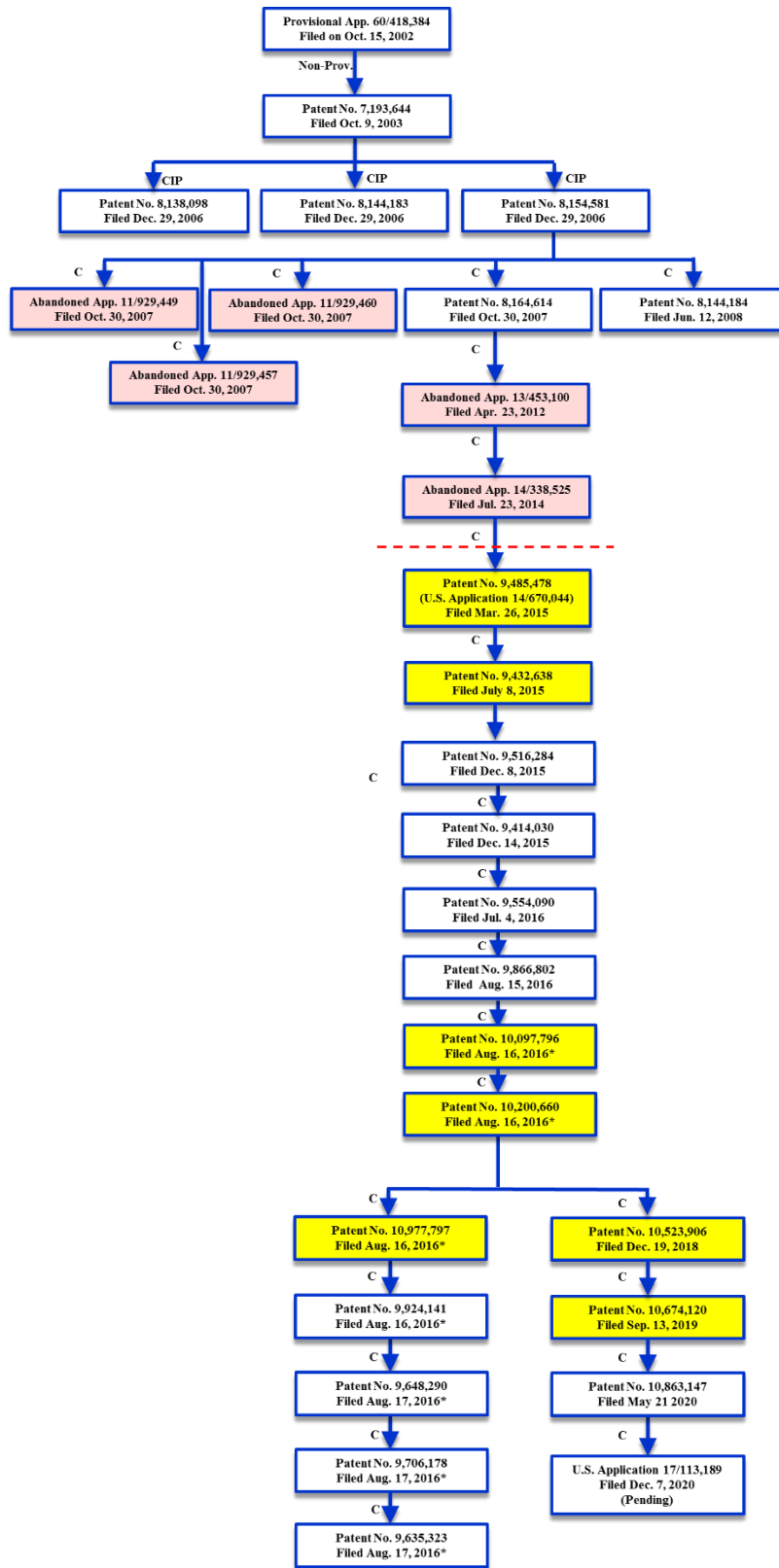
Discovery, including discovery relating to inventorship, is ongoing. Respondents reserve the right to assert that the asserted claims are invalid under 35 U.S.C. § 102(f) in the event Respondents obtain additional evidence that the inventors of the asserted patents did not invent the subject matter claimed therein. Should Respondents obtain such evidence, they will provide the name of the person(s) from whom and the circumstances under which the alleged invention or any part of it was derived.

Respondents also reserve their rights to challenge any of the claim terms herein under 35 U.S.C. § 112 beyond the grounds outlined in their responses to interrogatories related to invalidity, including by arguing that they are indefinite, not supported by the written description, or not enabled. Nothing stated herein shall be construed as a waiver of any argument available under 35 U.S.C. §§ 101, 102, 103, and/or 112.

III. ALL ASSERTED CLAIMS ARE ANTICIPATED BY PRIOR APPLICATIONS IN THE SAME PATENT FAMILY

Respondents contend that all asserted claims of the asserted patents are invalid under 35 U.S.C. §102 in view of applications and patents in the same family as the asserted patents that were filed and/or issued prior to when SkyBell abandoned its patent application and broke the priority chain.

The asserted patents are continuations that claim a priority date of October 15, 2002. The chart below illustrates the priority claim, with the asserted patents highlighted in yellow.



As illustrated above, the asserted patents claim priority, as continuations, to U.S. Patent No. 8,164,614 (the '614 patent), which was filed on October 30, 2007 and to U.S. Patent No. 8,154,581 ("the '581 patent"), which was filed on December 29, 2006. SkyBell contends that all of the asserted claims are at least entitled to claim priority to, and thus would be disclosed by, the '581 patent and the '614 patent. Complainants' Objections and Responses to Common Interrogatory No. 6. The application that led to the '581 patent was published on May 10, 2007 and the patent issued on April 10, 2012, and the application that led to the '614 patent was published on May 22, 2008 and the patent issued on April 24, 2012, all of which occurred more than one year before the application leading to the '478 patent (the earliest of the asserted patents) was filed on March 26, 2015. See SIMPLISAFE-SB-000175345; SIMPLISAFE-SB-17461. As SkyBell admits, the '581 and '614 patents are therefore prior art under § 102(b) (if pre-AIA § 102 applies) or § 102(a)(1) (if post-AIA § 102 applies) and anticipate the asserted claims, unless SkyBell can establish that the asserted patents are entitled to claim priority to the '581 patent. *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1305–06 (Fed. Cir. 2008) (where defendant established § 102(b) prior art would anticipate asserted claims, burden shifted to patentee "to come forward with evidence to prove entitlement to claim priority to an earlier filing date"); 4/7/2021 Hr'g Tr. 56:9–57:6.

In addition, SkyBell contends that the following asserted claims are entitled to claim priority to, and thus would be disclosed by, U.S. Patent No. 7,193,644 ("the '644 patent") and U.S. Provisional Application No. 60/418,384 (the "Provisional Application"): claim 6 of the '797 patent, claim 13 of the '906 patent, claim 1 of the '120 patent, claims 9, 10, 11, and 17 of the '478 patent, and claim 6 of the '638 patent. Complainants' Objections and Responses to Common Interrogatory No. 6. The '644 patent was filed on October 9, 2003, published on December 29, 2005, and issued on March 30, 2007. The Provisional Application was filed on October 15, 2002

and published at least as of December 29, 2005. Therefore, the '644 patent and the Provisional Application would be prior art under § 102(b) (if pre-AIA § 102 applies) or § 102(a)(1) (if post-AIA § 102 applies) and anticipate claim 6 of the '797 patent, claim 13 of the '906 patent, claim 1 of the '120 patent, claims 9, 10, 11, and 17 of the '478 patent, and claim 6 of the '638 patent unless SkyBell can establish the asserted patents are entitled to claim priority to the '644 patent and the Provisional Application.

SkyBell has admitted that every limitation of the asserted claims are disclosed by the '614, '581 and/or '644 patents. Complainants' Objections And Responses To Respondents' First Set Of Common Requests For Admission To Complainants, Nos. 53–54, 57–58, 61–62, 65–74, 77–88. Accordingly, if the '614, '581 and '644 patents are prior art to the asserted patents, every asserted claim is anticipated by the '614, '581 and '644 patents. SkyBell has admitted that at least the '478 patent is invalid if the '478 patent is found to have a priority date of March 26, 2015. *Id.* Nos. 170, 184.

SkyBell cannot meet this burden because the asserted patents are not entitled to claim priority earlier than the filing date of the '478 patent. Section 120 provides:

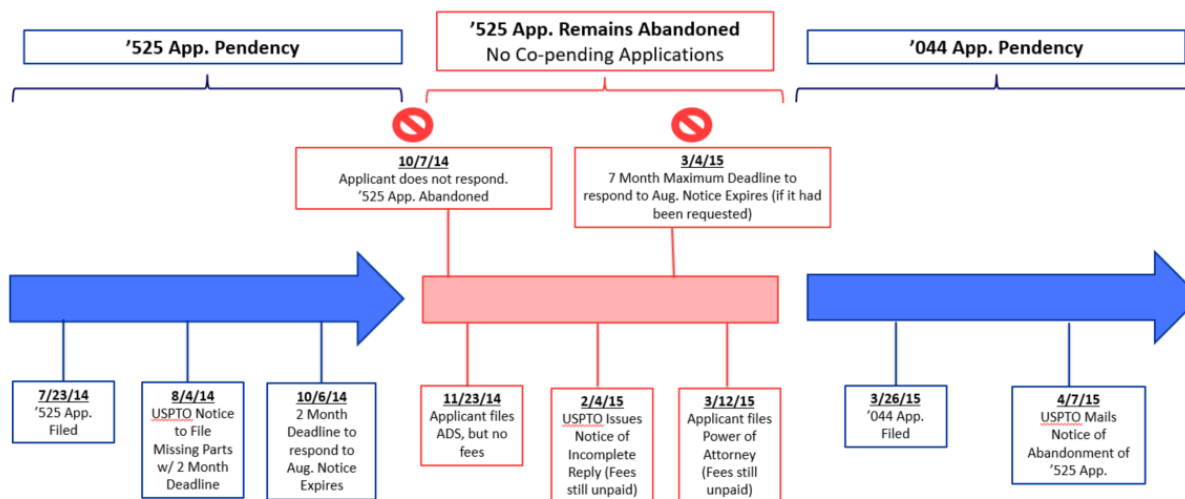
An application for patent for an invention disclosed in the manner provided by section 112(a) (other than the requirement to disclose the best mode) in an application previously filed in the United States..., which names an inventor or joint inventor in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, ***if filed before the patenting or abandonment of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the filing date of the first application*** and if it contains or is amended to contain a specific reference to the earlier filed application. ***No application shall be entitled to the benefit of an earlier filed application under this section unless an amendment containing the specific reference to the earlier filed application is submitted at such time during the pendency of the application*** as required by the Director

35 U.S.C. § 120 (emphases added). Here, the asserted patents are not “entitled to the benefit of [an] earlier filed application” than the application that led to the ’478 patent because the application that led to the ’478 patent was not “filed before the ... abandonment of ... an application similarly entitled to the benefit of the filing date of the first application.” *Id.* Specifically, the application leading to the ’478 patent was filed on March 26, 2015, but the application in the priority chain directly preceding the ’478 patent (“the ’525 application”) was abandoned more than five months earlier, on the expiration of the two-month reply deadline on October 6, 2014. Even if SkyBell were entitled to a five-month extension of that deadline, which it is not because it failed to pay the required extension fee, the application would be abandoned by March 4, 2015 which is still before the ’478 patent application was filed. *See* SIMPLISAFE-SB-00017461; SIMPLISAFE-SB-00019803. Thus, the asserted patents are not entitled to claim priority before the application leading to the ’478 patent was filed.

The ’525 application was filed on July 23, 2014. SIMPLISAFE-SB-00019803. On August 4, 2014, the PTO mailed an office action regarding a “notice to file missing parts of nonprovisional application” and specified that “[a]pplicant is given TWO MONTHS from the date of this Notice within which to file all required items below to avoid abandonment.” *Id.* The August 4, 2014 office action therefore set the deadline to respond as October 6, 2014. 35 U.S.C. § 133; 37 C.F.R. § 1.134 (“An Office action will notify the applicant of any non-statutory or shortened statutory time period set for reply to an Office action. Unless the applicant is notified in writing that a reply is required in less than six months, a maximum period of six months is allowed.”). The missing items were “the statutory basic filing fee”; “the application search fee”; “the application examination fee”; “the inventor’s oath or declaration or an application data sheet (ADS) naming each inventor”; and “replacement drawings in compliance with 37 C.F.R. § 1.84 and 37 C.F.R.

§ 1.21(d).” *Id.* The office action also specified the total fees that were necessary to avoid abandonment (\$1740). *Id.*

The applicant of the ’525 application (referred to herein as “Revolutionary Concepts”) filed nothing before the October 6, 2014 deadline. *See id.* The ’525 application was therefore “regarded as abandoned after midnight of the date the period for reply expired,” i.e., October 7, 2014. MPEP § 710.01(A).



As a result, the PTO properly listed the application as abandoned on October 7, 2014:

14/338,525 COMMUNICATION AND MONITORING SYSTEM 1043.060							
Select New Case	Application Data	Transaction History	Image File Wrapper	Continuity Data	Address & Attorney/Agent	Supplemental Content	Assignments
Transaction History							
Date	Transaction Description						
04-07-2015	Abandonment Mailed						
10-07-2014	Abandonment -- During Preexam Processing						
03-25-2015	Change in Power of Attorney (May Include Associate POA)						
03-25-2015	Correspondence Address Change						
02-04-2015	Mail Pre-Exam Notice						
02-04-2015	Notice of Incomplete Reply						
11-23-2014	A statement by one or more inventors satisfying the requirement under 35 USC 115, Oath of the Applic						
11-23-2014	Applicant has submitted new drawings to correct Corrected Papers problems						

An application is undisputedly abandoned in these circumstances. 35 U.S.C. § 133 (“***Upon failure of the applicant to prosecute the application*** within six months after any action therein, of which

notice has been given or mailed to the applicant, or ***within such shorter time***, not less than thirty days, ***as fixed by the Director in such action, the application shall be regarded as abandoned by the parties thereto.***) (emphases added); 37 C.F.R. § 1.135(a) (“If an applicant of a patent application fails to reply within the time period provided under § 1.134 and § 1.136, the application will become abandoned unless an Office action indicates otherwise.”); *Urologix Inc. v. ProstaLund AB*, 227 F. Supp. 2d 1033, 1040 (E.D. Wis. 2002) (holding an application became abandoned on the expiry of the 3-month time period set forth by the PTO to respond to an action); *Grasty v. U.S. Patent & Trademarks*, No. CIV.A.03-6839, 2005 WL 1155753, at *1 (E.D. Pa. May 12, 2005) (notice of incomplete reply issued on May 29, 2002, applicant did not meet June 7, 2002 deadline to correct deficiencies, and thus “the patent application became abandoned at midnight on June 7, 2002” and notice of abandonment sent 6 months later).

35 U.S.C. § 133 provides:

Upon failure of the applicant to prosecute the application within six months after any action therein, of which notice has been given or mailed to the applicant, ***or within such shorter time, not less than thirty days, as fixed by the Director in such action, the application shall be regarded as abandoned by the parties thereto.***

35 U.S.C. § 133 (emphasis added); *see also Urologix*, 227 F. Supp. 2d at 1040. First, the PTO “fixed” a two-month period expiring on October 6, 2014 as the deadline for it to respond to the Notice to File Missing Parts and “to file all required items [] to **avoid abandonment.**” SIMPLISAFE-SB-00007419; 37 C.F.R. § 1.134 (“An Office action will notify the applicant of any non-statutory or shortened statutory time period set for reply to an Office action. Unless the applicant is notified in writing that a reply is required in less than six months, a maximum period of six months is allowed.”). The Notice to File Missing Parts also informed Revolutionary Concepts that “[e]xtensions of time may be obtained by filing a petition accompanied by the

extension fee under the provisions of 37 C.F.R. § 1.136(a).” *Id.* Revolutionary Concepts filed no response prior to that date, nor did Revolutionary Concepts submit the fee required to obtain an extension. As a result, Section 133 requires “the application shall be regarded as abandoned.” 35 U.S.C. § 133; *Urologix*, 227 F. Supp. 2d at 1040 (holding that an application was abandoned for failure to respond to the PTO’s request for information within the prescribed time period, and where there was no evidence the applicant obtained an extension of time to respond or paid the fee accompanying a petition for extension); *In re Application of Bagaric*, Application No. 29/236,395, 2008 WL 4695035, at *1 (TMGI June 30, 2008) (where notice to file missing parts was mailed on February 27, 2006, “the application became abandoned on April 28, 2006, by operation of law, for failure to reply to the Notice to File Missing Parts of Nonprovisional Application within the period for response, including extensions of time”).

SkyBell, however, asserts that the deadline set for the response to the Notice to File Missing Parts is not a statutory time period and is therefore not subject to § 133 based on the MPEP. Yet this argument ignores the statute. Section 133 does not distinguish between “statutory” and “nonstatutory” deadlines. Instead, § 133 provides that “[u]pon failure of the applicant to prosecute the application within six months after **any action therein**, ... or within such shorter time ... as fixed by the Director in such action, the application shall be regarded as abandoned by the parties thereto.” 35 U.S.C. § 133. The Notice to File Missing Parts is “an action.” 37 C.F.R. §§ 1.104(a), 1.105, *see* MPEP § 704.12(c) (“Note that a 37 CFR 1.105 requirement, even absent an action on the merits, is an Office action.”). The regulations further confirm that failure to respond to an action in the specified time, regardless of whether a deadline is dubbed “statutory,” results in abandonment.¹ *See* 37 C.F.R. § 1.134 (“An Office action will notify the applicant of any non-

¹ In *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842–43 (1984), the Supreme Court established a framework for according deference to an agency’s interpretation of a statute that is tasked with

statutory or shortened statutory time period set for reply to an Office action. Unless the applicant is notified in writing that a reply is required in less than six months, a maximum period of six months is allowed.”); 37 C.F.R. § 1.135(a) (“if an applicant of a patent application fails to reply within the time period provided under § 1.134 and § 1.136, the application will become abandoned”). The MPEP does not change the substantive meaning of Section 133, nor does it change the procedures outlined in the regulations. MPEP Foreword (“The Manual does not have the force of law or the force of the rules in Title 37 of the Code of Federal Regulations.”).

Furthermore, a review of ’525 application’s status over time² confirms that the PTO listed the application as abandoned because the application was incomplete as of October 7, 2014:

administering. It further provided that if a “statute is silent or ambiguous with respect to the specific issue,” the court must then defer to the agency’s interpretation as long as it is “based on a permissible construction of the statute.” *Id.* at 843. Moreover, the Federal Circuit has held that “to uphold the agency’s interpretation, the court need not conclude that it was the only permissible construction or even the construction the court would have reached on its own reading of the statute. The agency’s interpretation must merely be ‘reasonable.’” *Eastman Kodak Co. v. Bell & Howell Document Mgmt. Prods. Co.*, 994 F.2d 1569, 1571 (Fed. Cir. 1993) (citations omitted). Thus, where the PTO’s interpretation is “permissible” and “reasonable,” as it is here, the PTO’s interpretation of 35 U.S.C. § 133, codified in 37 C.F.R. §§ 1.134–136, is subject to *Chevron* deference.

² Available on the PTO’s Public PAIR Patent Examination Research Dataset Overview for 2015 at <https://bulkdata.uspto.gov/data/patent/pair/economics/2015/csv.zip>

application number	event code	recorded date	sequence number	status code	status description
14338525	IEXX	7/23/2014	1	19	Application Undergoing Preexam Processing
14338525	BIG.	7/23/2014	2		
14338525	SCAN	7/23/2014	3		
14338525	L194	7/25/2014	4		
14338525	INCD	8/4/2014	5		
14338525	FLRCPT.O	8/4/2014	6		
14338525	C.AD	2/4/2015	7		
14338525	CORRDRW	11/23/2014	8		
14338525	OATHDECL	11/23/2014	9		
14338525	INCR	2/4/2015	10		
14338525	MPEN	2/4/2015	11		
14338525	C.AD	3/25/2015	12		
14338525	PA..	3/25/2015	13		
14338525	ABNX	10/7/2014	14	160	Abandoned -- Incomplete Application (Pre-examination)
14338525	MABN	4/7/2015	15		

The PTO explains that the “event_code” data “identifies the type of transaction” and that the prefix “ABN” indicates that the application was abandoned. Appendix B: Description of the Transaction History Tab Release, available at <https://www.uspto.gov/sites/default/files/documents/Appendix%20B.pdf>. The “sequence_number” data “is used to order the transaction that are displayed . . . [but] are not necessarily listed in perfect order by date.” Importantly, the PTO explains that the “recorded_date” data “indicates the date that each transaction occurred and corresponds to the ‘Date’ column on the ‘Transaction History’ tab” thereby confirming that the ’525 application was abandoned on October 7, 2014. *Id.* Courts have readily taken judicial notice of such data. *See Kaleasy Tech LLC v. Slack Techs., Inc.*, Civil Action No. 19-2167-CFC-SRF, 2020 WL 4260605, n. 2 (D. Del. July 23, 2020) (taking judicial notice of the information found on the Application Data and Transaction History tabs under Rule 201(b) of the Federal Rules of Evidence); *see also Kamdem-Ouaffo v. PepsiCo, Inc.*, 160 F. Supp. 3d 553, n. 20 (S.D.N.Y. 2016) *citing Telebrands Corp. v.*

Del Labs., Inc., 719 F. Supp. 2d 283, n.3 (S.D.N.Y. 2010) (“The [c]ourt may properly take judicial notice of official records of the [PTO] . . .”).

Second, even if the six (or even seven) months from the Notice to File Missing Parts was the applicable deadline, § 133 still requires that the application “be regarded as abandoned” because the “response” Revolutionary Concepts submitted was deficient. While Revolutionary Concepts did submit an ADS on November 23, 2014, the PTO notified the applicant that ADS was deficient because it did not “identify each inventor by his or her legal name.” And Revolutionary Concepts failed to submit (1) the \$280 statutory basic filing fee; (2) the \$600 application search fee; (3) the \$720 application examination fee; (4) the inventor’s oath or declaration or an application data sheet naming each inventor in compliance with 37 C.F.R. §§ 1.63, 1.64, or 1.76; (5) replacement drawings in compliance with 37 C.F.R. § 1.84 and 37 C.F.R. § 1.121(d); and (6) the \$140 surcharge as set forth in 37 C.F.R. § 1.16(f), all of which were required by the Notice to File Missing Parts. SIMPLISAFE-SB-00007419. Section 1.135(b) provides that “[t]he admission of an amendment not responsive to the last Office action,” which is, at most, what Revolutionary Concepts submitted, “shall not operate to save the application from abandonment.” 37 C.F.R. § 1.135(b). While Section 1.135(a) provides that “[i]f an applicant of a patent application fails to reply within the time period provided under § 1.134 and § 1.136, the application will become abandoned unless an Office action indicates otherwise,” that the examiner never issued any such office action. *Id.* § 1.135(a). Section 1.135(a) “contemplates an express indication of an alternative to abandonment for failure to properly respond to an Office action,” e.g., the examiner could conclude that “the failure to copy or make claims for purposes of an interference is a disclaimer of the subject matter rather than abandonment of the application.” *In re Goodman*, 3 U.S.P.Q.2d 1866, 1987 WL 124308, at *3–4 (Com’r Pat. & Trademarks 1987) (rejecting argument

that “the examiner's issuance of a final rejection after the applicants filed their response to the first Office action was tacitly an indication that the application was not abandoned”). “To interpret the rule otherwise would totally vitiate the provision of subsection (b) that the admission of a nonresponsive amendment and any prosecution related to that amendment cannot save the application from abandonment.” *See id.* (referring to 37 C.F.R. § 1.135(b)).³

Section (c) of the same regulation likewise does not remedy the abandonment of the ’525 application. Under that section,

(c) When reply by the applicant is a bona fide attempt to advance the application to final action, and is substantially a complete reply to the non-final Office action, but consideration of some matter or compliance with some requirement has been inadvertently omitted, applicant may be given a new time period for reply under § 1.134 to supply the omission

37 C.F.R. § 1.135. This rule is based on a Circular of July 26, 1934, which states, in pertinent part:

Where a bona fide response to an examiner’s action is filed before the expiration of the six months allowed by law, but through an apparent oversight or inadvertence some point necessary to a complete response has been omitted, -- such as an amendment or argument as to one of several claims involved or an election of species under *ex parte* Doane, or signature to the amendment, -- the examiner, so soon as he notes the omission, should require the applicant to complete his response within a specified time limit (as 20 days). If this is done the application should not be held abandoned even if the six months has then expired.

In Re Kokaji, 2 U.S.P.Q.2d 1309, 1987 WL 123812, at *3 (Com’r Pat. & Trademarks 1987) (citation omitted). “The practice announced in the Circular of July 26, 1934, was never intended to cover the situation present in this case, viz., where a necessary document (i.e., a petition for an extension of time) was not filed at all.” *Id.* This section is therefore inapplicable to the ’525 application because Revolutionary Concepts did not submit the necessary documents at all. *See*

³ Section 1.135(b) provides as follows: “(b) Prosecution of an application to save it from abandonment pursuant to paragraph (a) of this section must include such complete and proper reply as the condition of the application may require. The admission of, or refusal to admit, any amendment after final rejection or any amendment not responsive to the last action, or any related proceedings, will not operate to save the application from abandonment.”

id., at *4 (continuation not entitled to claim priority to earlier application that was abandoned prior to filing of continuation).

Third, regardless of whether the two-month period is statutory or non-statutory, Revolutionary Concepts failed to file a petition with an accompanying fee seeking an extension of time to reply in compliance with 37 C.F.R. § 1.136(a). As a result, merely filing an ADS on November 23, 2014 was insufficient to keep the '525 application from becoming abandoned. 37 C.F.R. § 1.135(a); *see Urologix*, 227 F. Supp. 2d at 1040. *Fourth*, the PTO's Notice of Incomplete Reply dated February 4, 2015 does not alter the abandonment as of October 6, 2014. *See* PTO's April 16, 2019 "Changes to Pre-Examination Notices" *available at* <https://www.uspto.gov/sites/default/files/documents/preexam-notices-20190416.pdf> (clarifying that the two month time period to reply referred to in the Notice of Incomplete Reply runs from the *previous notice*, i.e. the Notice to File Missing Parts, and that it does *not* "provid[e] a new two month time period to reply") (emphases added); *see also Bagaric*, 2008 WL 4695035, at *1 ("Notice of Abandonment incorrectly indicated that the application was abandoned for failure to timely reply to the Decision on Petition," but that did not change the fact that the application was abandoned by "operation of law" for failure to respond to the notice of missing parts).

The '525 application was also abandoned prior to the filing of the '478 patent application for the independent reason that Revolutionary Concepts failed to pay the filing fees for nonprovisional applications—which includes continued prosecution or reissue applications—set forth under 35 U.S.C. § 111(a). *See Figueroa v. U.S.*, 466 F.3d 1023, 1027 (Fed. Cir. 2006) ("Failure to pay application or issuance fees is treated as an abandonment of the application"), 1031 ("Patent fees are a condition on the grant of a patent right; failure to pay the required fees results in denial of a patent."); *see also Ross v. U.S.*, 374 Fed. Appx. 960, 961 (Fed. Cir. 2010)

(affirming lower court's dismissal of a complaint for failure to state a claim for a patent application that was abandoned after the applicant failed to pay the required filing fees); *Pupols v. U.S. Patent and Trademark Office*, 413 Fed. Appx. 232, 233 (Fed. Cir. 2011) (upholding lower court's decision on defendant's motion to dismiss related to a patent application that was abandoned after the applicant failed to pay the required fees). These fees included the basic filing fee as set forth in 37 C.F.R. § 1.16(a)–(e); the application search fee as set forth in 37 C.F.R. § 1.16(k)–(n); the examination fee as set forth in 37 C.F.R. § 1.16(o)–(r); and the application size fee as set forth in 37 C.F.R. § 1.16(s). The basic filing, search, and examination fees are due on filing of the nonprovisional application under 35 U.S.C. § 111(a) but were not received by the PTO as noted in its Notice to File Missing Parts dated August 4, 2014. SIMPLISAFE-SB-00007419. 35 U.S.C. § 111(a)(3) provides:

The application shall be accompanied by the fee required by law. The fee, oath or declaration, and 1 or more claims may be submitted after the filing date of the application, within such period and under such conditions, including the payment of a surcharge, as may be prescribed by the Director. Upon failure to submit the fee, oath or declaration, and 1 or more claims within such prescribed period, the application shall be regarded as abandoned.

35 U.S.C. § 111(a)(3). Section 111 plainly authorized the Director to set the time period for payment of fees during prosecution, and the regulations enacted by the Director “prescribed” the “period and ... conditions” for submitting fees in Section 1.53(f) of the C.F.R.:

If an application . . . does not include the basic filing fee, the search fee, the examination fee, or an oath or declaration by the applicant . . . ***[the] applicant has two months from the filing date of the application within which to pay the basic filing fee, search fee, and examination fee, file an oath or declaration, and pay the surcharge required by § 1.16(f) to avoid abandonment.***

37 C.F.R. § 1.53(f) (emphases added). This is not, as SkyBell contends, a substantive regulation. Rather, the Director has prescribed the procedure that governs the submission of fees for applications. The effect of failure to submit those fees, i.e., abandonment, is what the statute

prescribes. *See, e.g., Daiichi Sankyo Co. v. Lee*, 791 F.3d 1373, 1379–80 (Fed. Cir. 2015) (finding the PTO has authority to make procedural regulations such as the procedures of patent term adjustment reconsideration).

Additionally, the '525 application cannot be relied on for a priority claim because it does not include “a specific reference to the earlier filed application.” 37 C.F.R. § 1.78(d)(2). 35 U.S.C. § 120 requires that “the reference required by this paragraph must be included in an application data sheet.” 37 C.F.R. § 1.78(d)(3)(i) further states that the reference (in the form of an application data sheet, or “ADS,” “must be submitted *during the pendency* of the later-filed application.” (emphasis added). 37 C.F.R. § 1.78 (d)(3)(iii) warns that “failure to timely submit the reference required by 35 U.S.C. § 120 and paragraph (d)(2) of this section is considered a *waiver* of any benefit under 35 U.S.C. 120 ...” (emphasis added). The '525 application was not filed with any ADS, let alone an ADS compliant with the specific reference requirement. No ADS was filed until after the '525 application was abandoned on October 7, 2014; thus no ADS satisfying the specific reference requirement was filed during the pendency of the '525 application. Accordingly, any benefit under § 120 was waived by failure to timely submit the required ADS during the pendency of the '525 application.

SkyBell’s reliance on the Federal Circuit’s decision in *Aristocrat Technologies Australia PTY Ltd. v. International Game Technology*, 543 F.3d 657 (Fed. Cir. 2008), is also misplaced. In *Aristocrat*, the Court addressed “whether improper revival” of an abandoned application “is ‘made a defense’ by title 35.” *Id.* at 662. The Court concluded it was not, reasoning that “[b]ecause the proper revival of an abandoned application is neither a fact or act made a defense by title 35 nor a ground specified in part II of title 35 as a condition for patentability, we hold that improper revival may not be asserted as a defense in an action involving the validity or infringement of a patent.”

Id. at 663. Here, however, “[t]he fundamental ... question ... is ... **not** (as in *Aristocrat*) whether the patent-in-suit is invalid because of ‘improper revival.’” *Avanir Pharm., Inc. v. Actavis S. Atl. LLC*, 987 F. Supp. 2d 504, 510 (D. Del. 2013). Rather, the issue here is whether,

even if the PTO did treat the [’525 application and the application leading to the ’478 patent] as co-pending, did co-pendency actually exist? This inquiry is statutorily demanded in determining the correct priority date; for any patent application claiming priority to an earlier application, co-pendency is required under § 120. *Aristocrat* did not concern co-pending applications, and it did not address § 120. In the Court’s view, *Aristocrat* does not prohibit a factual inquiry into the existence of statutorily required co-pendency.

Id. at 511–12. Although SkyBell points to dicta from *Aristocrat* that “[o]nce a patent has issued, the procedural minutiae of prosecution have little relevance to the metes and bounds of the patentee’s right to exclude,” whether a patentee has satisfied the requirements to claim priority under § 120 is not simply procedural minutiae. 543 F.3d at 663. It is a substantive issue that courts regularly address in patent litigation. *See, e.g., Ross*, 374 Fed. Appx. at 961 (where applicant’s attempt at claiming priority to a previously filed application that was abandoned for failure to pay the required filing fees was rejected by the PTO because the applications were not co-pending); *Natural Alternatives Int’l, Inc. v. Iancu*, 904 F.3d 1375, 1379–82 (Fed. Cir. 2018) (“Entitlement to priority under § 120 is a legal determination based on underlying fact findings.”); *Encyclopaedia Britannica Inc. v. Alpine Elecs. Of Am., Inc.*, 609 F.3d 1345, 1349–52 (Fed. Cir. 2010) (discussing the language of § 120 and “whether it requires an intermediate application in a priority chain to ‘contain a specific reference to an earlier filed application’”); *Medtronic CoreValve, LLC v. Edwards Lifesciences Corp.*, 741 F.3d 1359, 1363–66 (Fed. Cir. 2014) (discussing the requirements under § 120 to show a complete priority chain); *Droplets, Inc. v. E*TRADE Bank*, 887 F.3d 1309, 1315–20 (Fed. Cir. 2018) (discussing a patentee’s burden of providing notice of the asserted priority date under § 120); *Worlds, Inc. v. Activision Blizzard, Inc.*, No. 12-10576-DJC,

2014 WL 972135 at *4–8 (D. Mass. Mar. 13 , 2014) (discussing the priority claim of several asserted patents). Moreover, *Aristocrat*’s dicta is further inapposite because the ’525 application never issued—it was abandoned. Simply put, SkyBell has “cited no authority for the proposition that the PTO has ‘discretionary authority’ to treat two applications as co-pending when, as a matter of fact, they were not co-pending. Section 120 is written in absolute terms[.]” *Avanir*, 987 F. Supp. 2d at 511–12 (concluding no co-pendency under § 120 because ’053 application was abandoned on August 30, 1993 but ’845 application not filed until September 2, 1993).

Furthermore, while the applicant relied on its priority claim to the ’644 patent to overcome prior art rejections during prosecution, the applicant failed to disclose to the PTO that this priority claim was premised on the priority claim to the abandoned ’525 application. The PTO, therefore, did not specifically consider whether the ’525 application was abandoned before the ’478 patent was filed during prosecution. But applicant’s reliance on its alleged priority date to overcome a prior art rejection, combined with its failure to disclose the basis for its priority claim, confirms that the ’638 patent was procured by inequitable conduct, which necessarily infects later-issued patents in the same family. *Nilssen v. Osram Sylvania, Inc.*, 504 F.3d 1223, 1230 (Fed. Cir. 2007) (“inequitable conduct with respect to one or more patents in a family can infect related applications”); *see also* Complainants’ Objections and Responses to Respondents’ First Set of Common Interrogatories No. 41–46; *Arrow Intern., Inc. v. Spire Biomedical, Inc.*, 635 F. Supp. 2d 46, 63 (D. Mass. 2009) (holding a patent examiner’s independent duty to verify priority date did not relieve patentee of obligation to affirmatively raise issues related to the proper priority date for patent applications).

Complainants were aware that “Zmodo Technology Co. Ltd. asserted that the ’525 application and [U.S. Patent Application No. 14/670,044, which issued as the ’478 patent,] were

not copending applications in litigation in the Western District of North Carolina, Case No. 3:16-cv-789 and in the District of Nevada, Case No. 3:17-cv-686.” Complainants’ Objections and Responses to Common Interrogatory No. 44. Yet Complainants failed to disclose briefing or any other related information in an information disclosure statement to the PTO prior to at least the issuance of the ’796 patent on October 9, 2018. If the examiner were aware of the arguments raised by Zmodo and by Respondents here, the ’796 patent would have never issued. Accordingly, at least the ’796 patent is unenforceable through inequitable conduct as well as all later-issued patents related thereto.

Moreover, SkyBell argues the even if the ’525 application was abandoned before the application leading to the ’478 patent was filed (which it was), the priority claim is still proper because the application leading to the ’478 patent was filed before the ’525 application’s prosecution was “terminated.” Section 120, however, does not require that an application proceeding be terminated *in addition to* the application being abandoned. In fact, the ’525 application was never even subject to any of the limited types of proceedings that are “terminated.” See 35 U.S.C. § 120; 37 C.F.R. § 1.137 (a) (“a petition may be filed pursuant to this section to revive an abandoned application or a reexamination prosecution terminated under § 1.550(d) or § 1.957(b) or limited under § 1.957(c)”; 37 C.F.R. § 1.197 (a) (“Proceedings on an application are considered terminated by the dismissal of an appeal or the failure to timely file an appeal to the court or a civil action”). Moreover, SkyBell’s reliance on *Merck & Co. v. Commercial Solvents Corp.*, 225 F. Supp. 318, 325 (D. Md. 1964) is inapposite because the Maryland district court clarified that an *allowance* does not terminate proceedings. Indeed, *Merck* does not stand for the proposition that an application must be abandoned in addition to being terminated.

Finally, SkyBell's argument that an abandoned patent is still pending if it has not yet been terminated is an exception that swallows the rule. Under this construct of § 120's requirement of filing "before the patenting or abandonment of or termination of proceedings," an issued patent would forever be copending because the issued patent has never been terminated. Under similar reasoning, the '525 application to this day would still copending because, though it has been abandoned and terminated, it has not yet been patented. Accordingly, if all three conditions must occur before an application is no longer pending, as SkyBell contends, any and all applications would be forever copending because an issued patent can never be abandoned. But this reading nullifies the rule itself by permitting unlimited time to file a copending application. SkyBell's interpretation therefore cannot be correct, and is in fact contrary to Federal Circuit precedent. *See, e.g., PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1304-06 (Fed. Cir. 2008) (finding a gap in a patent's priority chain); *Zenon Envtl., Inc. v. U.S. Filter Corp.*, 506 F.3d 1370, 1377-81 (Fed. Cir. 2007) (finding a patent anticipated by a "grandparent patent" in its broken priority chain); *Medtronic CoreValve*, 741 F.3d at 1367 (affirming the district court's finding that the '281 Patent was not entitled to an earlier priority date because it failed to comply with the requirements of 35 U.S.C. § 120 and that '281 Patent was invalid as anticipated under 35 U.S.C. § 102); *see also Ex parte Lazar*, No. Appeal 2013-009758, 2015 WL 5676867, at *3 (P.T.A.B. Sept. 24, 2015) ("[T]he prior application was abandoned before the present application was filed, so the copendency requirement for filing date priority of 35 U.S.C. § 120 is not met.").

For these reasons, the asserted patents are not entitled to claim priority earlier than the application that led to the '478 patent, and all asserted claims are invalid under § 102(b) in view of at least the '581 patent.

IV. LEVEL OF ORDINARY SKILL IN THE ART

For each of the asserted patents, Respondents contend that the one of ordinary skill in the art would have been an individual with a bachelor's degree in computer science, electrical engineering, computer engineering or a related field, and two years of experience in the research, design, development and/or testing of camera systems, sensor systems, video processing systems, networked communication systems, database systems and/or related firmware and software, or the equivalent, with additional education substituting for experience and vice versa.

V. U.S. PATENT NO. 10,097,796

A. Relevant Prior Art

Respondents contend that the prior art references identified in Respondents' contentions anticipate or render obvious the asserted claims. Based on the information reasonably available to Respondents, the priority date of the asserted claims of the '796 patent is no earlier than December 29, 2006, the filing date of the '581 patent to which the '796 patent claims priority. The '581 patent is a continuation-in-part of the '644 patent and introduced new matter. Despite having the burden of proof, Complainants has offered no evidence that any asserted claim of the '796 patent is entitled to a priority date earlier than December 29, 2006. Below, Respondents list some of the prior art cited in these contentions:

1. Patents and Printed Publications

Prior Art Reference	Bates Range
U.S. Patent No. 3,480,727 to Moore	RESP_ITC_1242_00007696- RESP_ITC_1242_00007704
U.S. Patent No. 4,075,659 to Desanti	RESP_ITC_1242_00007705- RESP_ITC_1242_00007711
U.S. Patent No. 4,370,675 to Cohn	RESP_ITC_1242_00007712- RESP_ITC_1242_00007719
U.S. Patent No. 4,524,384 to Lefkowitz	RESP_ITC_1242_00007720- RESP_ITC_1242_00007732
U.S. Patent No. 4,764,953 to Chern	RESP_ITC_1242_00007733-

Prior Art Reference	Bates Range
	RESP_ITC_1242_00007741
U.S. Patent No. 4,843,461 to Tatsumi	RESP_ITC_1242_00007742- RESP_ITC_1242_00007757
U.S. Patent No. 4,959,713 to Morotomi	RESP_ITC_1242_00007758- RESP_ITC_1242_00007774
U.S. Patent No. 5,151,945 to Lee	RESP_ITC_1242_00006781- RESP_ITC_1242_00006794
U.S. Patent No. 5,428,388 to von Bauer	RESP_ITC_1242_00007474- RESP_ITC_1242_00007498
U.S. Patent No. 5,717,379 to Peters	RESP_ITC_1242_00003087- RESP_ITC_1242_00003093
U.S. Patent No. 5,822,542 to Smith	RESP_ITC_1242_00005889- RESP_ITC_1242_00006097
U.S. Patent No. 5,861,804 to Fansa	RESP_ITC_1242_00006795- RESP_ITC_1242_00006803
U.S. Patent No. 5,878,283 to House	RESP_ITC_1242_00006804- RESP_ITC_1242_00006825
U.S. Patent No. 6,060,994 to Chen	RESP_ITC_1242_00007499- RESP_ITC_1242_00007513
U.S. Patent No. 6,064,303 to Klein	RESP_ITC_1242_00006826- RESP_ITC_1242_00006840
U.S. Patent No. 6,069,655 to Seeley	RESP_ITC_1242_00003234- RESP_ITC_1242_00003257
U.S. Patent No. 6,097,429 to Seeley	RESP_ITC_1242_00006841- RESP_ITC_1242_00006855
U.S. Patent No. 6,104,785 to Chen	RESP_ITC_1242_00007514- RESP_ITC_1242_00007521
U.S. Patent No. 6,134,303 to Chen	RESP_ITC_1242_00007522- RESP_ITC_1242_00007529
U.S. Patent No. 6,185,294 to Chornenky	RESP_ITC_1242_00007530- RESP_ITC_1242_00007540
U.S. Patent No. 6,323,897 to Kogane	RESP_ITC_1242_00006098- RESP_ITC_1242_00006109
U.S. Patent No. 6,359,560 to Budge	RESP_ITC_1242_00006110- RESP_ITC_1242_00006127
U.S. Patent No. 6,385,772 to Courtney	RESP_ITC_1242_00003405- RESP_ITC_1242_00003413
U.S. Patent No. 6,400,265 to Saylor	RESP_ITC_1242_00006856- RESP_ITC_1242_00006883
U.S. Patent No. 6,421,080 to Lambert	RESP_ITC_1242_00006884- RESP_ITC_1242_00006893
U.S. Patent No. 6,424,371 to Wen	RESP_ITC_1242_00006894- RESP_ITC_1242_00006905
U.S. Patent No. 6,476,858 to Diaz	RESP_ITC_1242_00006128-

Prior Art Reference	Bates Range
	RESP_ITC_1242_00006145
U.S. Patent No. 6,542,078 to Script	RESP_ITC_1242_00007541- RESP_ITC_1242_00007557
U.S. Patent No. 6,816,085 to Haynes	RESP_ITC_1242_00006906- RESP_ITC_1242_00006923
U.S. Patent No. 6,828,909 to Script	RESP_ITC_1242_00007558- RESP_ITC_1242_00007586
U.S. Patent No. 6,943,682 to Dowens	RESP_ITC_1242_00003831- RESP_ITC_1242_00003841
U.S. Patent No. 6,956,478 to Oyagi	RESP_ITC_1242_00006924- RESP_ITC_1242_00006971
U.S. Patent No. 7,012,523 to Stuart	RESP_ITC_1242_00004004- RESP_ITC_1242_00004014
U.S. Patent No. 7,015,943 to Chiang	RESP_ITC_1242_00004040- RESP_ITC_1242_00004054
U.S. Patent No. 7,019,770 to Katz	RESP_ITC_1242_00004072- RESP_ITC_1242_00004100
U.S. Patent No. 7,113,090 to Saylor	RESP_ITC_1242_00007587- RESP_ITC_1242_00007626
U.S. Patent No. 7,119,609 to Naidoo	RESP_ITC_1242_00007627- RESP_ITC_1242_00007646
U.S. Patent No. 7,123,142 to Bohbot	RESP_ITC_1242_00008184- RESP_ITC_1242_00008201
U.S. Patent No. 7,187,279 to Chung	RESP_ITC_1242_00008202- RESP_ITC_1242_00008225
U.S. Patent No. 7,193,644 to Carter	RESP_ITC_1242_00004259- RESP_ITC_1242_00004272
U.S. Patent No. 7,242,295 to Milinusic	RESP_ITC_1242_00004273- RESP_ITC_1242_00004316
U.S. Patent No. 7,262,690 to Heaton	RESP_ITC_1242_00008226- RESP_ITC_1242_00008244
U.S. Patent No. 7,277,010 to Joao	RESP_ITC_1242_00004322- RESP_ITC_1242_00004411
U.S. Patent No. 7,310,111 to Ramirez-Diaz	RESP_ITC_1242_00008017- RESP_ITC_1242_00008034
U.S. Patent No. 7,403,116 to Bittner	RESP_ITC_1242_00008245- RESP_ITC_1242_00008256
U.S. Patent No. 7,529,485 to Farmer	RESP_ITC_1242_00008257- RESP_ITC_1242_00008311
U.S. Patent No. 7,609,941 to Matsukawa	RESP_ITC_1242_00008312- RESP_ITC_1242_00008364
U.S. Patent No. 7,786,891 to Owens	RESP_ITC_1242_00008365- RESP_ITC_1242_00008383
U.S. Patent No. 7,952,609 to Simerly	RESP_ITC_1242_00008384-

Prior Art Reference	Bates Range
	RESP_ITC_1242_00008409
U.S. Patent No. 7,956,739 to Hong	RESP_ITC_1242_00008410- RESP_ITC_1242_00008428
U.S. Patent No. 8,154,581 to Carter	RESP_ITC_1242_00007386- RESP_ITC_1242_00007409
U.S. Patent No. 8,164,614 to Carter	RESP_ITC_1242_00007410- RESP_ITC_1242_00007434
U.S. Patent No. 8,520,068 to Naidoo	RESP_ITC_1242_00004713- RESP_ITC_1242_00004735
U.S. Patent No. 8,619,136 to Howarter	RESP_ITC_1242_00008429- RESP_ITC_1242_00008445
U.S. Patent No. 8,948,245 to Henson	RESP_ITC_1242_00008446- RESP_ITC_1242_00008519
U.S. Patent No. 9,250,267 to Jackson	RESP_ITC_1242_00006146- RESP_ITC_1242_00006161
U.S. Patent No. 9,300,921 to Naidoo	RESP_ITC_1242_00007647- RESP_ITC_1242_00007670
U.S. Patent No. 9,579,913 to Menard	RESP_ITC_1242_00007944- RESP_ITC_1242_00008016
Published U.S. App. 2002/0016971 to Berezowski	RESP_ITC_1242_00005283- RESP_ITC_1242_00005325
Published U.S. App. 2002/0030583 to Jang	RESP_ITC_1242_00001473- RESP_ITC_1242_00001479
Published U.S. App. 2002/0067259 to Fufidio	RESP_ITC_1242_00005326- RESP_ITC_1242_00005343
Published U.S. App. 2002/0071031 to Lord	RESP_ITC_1242_00006721- RESP_ITC_1242_00006728
Published U.S. App. 2002/0075307 to Alexander	RESP_ITC_1242_00001493- RESP_ITC_1242_00001520
Published U.S. App. 2002/0076049 to Boykin	RESP_ITC_1242_00006729- RESP_ITC_1242_00006741
Published U.S. App. 2002/0118283 to Guerrero	RESP_ITC_1242_00001541- RESP_ITC_1242_00001567
Published U.S. App. 2002/0147982 to Naidoo	RESP_ITC_1242_00001568- RESP_ITC_1242_00001591
Published U.S. App. 2003/0046557 to Miller	RESP_ITC_1242_00005344- RESP_ITC_1242_00005387
Published U.S. App. 2003/0061344 to Monroe	RESP_ITC_1242_00005451- RESP_ITC_1242_00005597
Published U.S. App. 2003/0062997 to Naidoo	RESP_ITC_1242_00006742- RESP_ITC_1242_00006764
Published U.S. App. 2003/0071724 to D'Amico	RESP_ITC_1242_00007443- RESP_ITC_1242_00007458
Published U.S. App. 2003/0075287 to Weik	RESP_ITC_1242_00005388-

Prior Art Reference	Bates Range
	RESP_ITC_1242_00005405
Published U.S. App. 2003/0081747 to Ahlstrom	RESP_ITC_1242_00005406- RESP_ITC_1242_00005419
Published U.S. App. 2003/0095184 to Lin	RESP_ITC_1242_00001744- RESP_ITC_1242_00001749
Published U.S. App. 2003/0095185 to Naifeh	RESP_ITC_1242_00001750- RESP_ITC_1242_00001771
Published U.S. App. 2003/0103138 to Assayag	RESP_ITC_1242_00005420- RESP_ITC_1242_00005429
Published U.S. App. 2003/0122514 to Mercier	RESP_ITC_1242_00001772- RESP_ITC_1242_00001780
U.S. Patent Publication, No. 2003/0117280 to Prehn	RESP_ITC_1242_00008173- RESP_ITC_1242_00008183
Published U.S. App. 2003/0171930 to Junqua	RESP_ITC_1242_00005430- RESP_ITC_1242_00005442
Published U.S. App. 2003/0206101 to Dixon	RESP_ITC_1242_00005443- RESP_ITC_1242_00005450
Published U.S. App. 2004/0003051 to Krzyanowski	RESP_ITC_1242_00005598- RESP_ITC_1242_00005622
Published U.S. App. 2004/0036603 to Bingham	RESP_ITC_1242_00006765- RESP_ITC_1242_00006780
Published U.S. App. 2004/0080615 to Klein	RESP_ITC_1242_00001858- RESP_ITC_1242_00001867
Published U.S. App. 2004/0080627 to Kroll	RESP_ITC_1242_00001868- RESP_ITC_1242_00001885
Published U.S. App. 2005/0001717 to Bohbot	RESP_ITC_1242_00002049- RESP_ITC_1242_00002067
Published U.S. App. 2005/0165612 to Van Rysselberghe	RESP_ITC_1242_00002127- RESP_ITC_1242_00002142
Published U.S. App. 2006/0095539 to Renkis	RESP_ITC_1242_00005630- RESP_ITC_1242_00005651
Published U.S. App. 2006/0171453 to Rohlfing	RESP_ITC_1242_00005652- RESP_ITC_1242_00005693
Published U.S. App. 2007/0162748 to Okayama	RESP_ITC_1242_00007792- RESP_ITC_1242_00007845
Published U.S. App. 2009/0224912 to Sobol	RESP_ITC_1242_00002862- RESP_ITC_1242_00002867
Published U.S. App. 2006/0255931 to Hartsfield	RESP_ITC_1242_00005694- RESP_ITC_1242_00005727
Published U.S. App. 2019/0058720 to Lindquist	RESP_ITC_1242_00007459- RESP_ITC_1242_00007473
U.S. Pat. Pub. No. 2005/0285934 to Carter	RESP_ITC_1242_00002160- RESP_ITC_1242_00002173
U.S. Pat. Pub. No. 2007/0103548 to Carter	RESP_ITC_1242_00005776-

Prior Art Reference	Bates Range
	RESP_ITC_1242_00005800
U.S. Pat. Pub. No. 2008/0117299 to Carter	RESP_ITC_1242_00002809- RESP_ITC_1242_00002833
Canadian Patent No. 2228679 to Heggie	RESP_ITC_1242_00006698- RESP_ITC_1242_00006720
French Patent No. FR 2759804 to Bonsaglio	RESP_ITC_1242_00001331- RESP_ITC_1242_00001347
United Kingdom Patent Application No. GB2285365 to Yau	RESP_ITC_1242_00001348- RESP_ITC_1242_00001373
Japan Patent No. JPH 09-107409	RESP_ITC_1242_00007775- RESP_ITC_1242_00007783
Korea Patent No. KR 100373449 to Son	RESP_ITC_1242_00001391- RESP_ITC_1242_00001408
Korea Patent No. KR 19980039422 to Sunghwa Kim Won-joon	RESP_ITC_1242_00001417- RESP_ITC_1242_00001421
Korea Patent No. KR 20010074212 to Shin	RESP_ITC_1242_00001422- RESP_ITC_1242_00001425
International Patent No. WO 99/06976 to Meyvis	RESP_ITC_1242_00006972- RESP_ITC_1242_00006995
International Patent No. WO 01/27763 to Simerly	RESP_ITC_1242_00006996- RESP_ITC_1242_00007042
International Patent No. WO 01/50731 to Noyman	RESP_ITC_1242_00005004- RESP_ITC_1242_00005038
International Patent No. WO 01/93220 to Menard	RESP_ITC_1242_00005039- RESP_ITC_1242_00005131
International Patent No. WO 01/097524 to Scaman	RESP_ITC_1242_00006454- RESP_ITC_1242_00006486
International Patent No. WO 02/005220 to Bennett	RESP_ITC_1242_00005132- RESP_ITC_1242_00005152
International Patent No. WO 02/065420 to Vojtech	RESP_ITC_1242_00006487- RESP_ITC_1242_00006509
International Patent No. WO 03/028375 to Hong	RESP_ITC_1242_00007043- RESP_ITC_1242_00007075
International Patent No. WO 2006/046234 to Segel	RESP_ITC_1242_00008520- RESP_ITC_1242_00008521
“Motion Activated Video Surveillance Using TI DSP,” Carnegie Mellon University, August 4-6, 1999, available at https://www.ti.com/sc/docs/general/dsp/fest99/avi/1paper.pdf .	RESP_ITC_1242_00005272- RESP_ITC_1242_00005277
“Video Surveillance Equipment Selection and Application Guide,” NIJ Guide 201-99, October 1999, available at https://www.ojp.gov/pdffiles1/nij/179545.pdf .	RESP_ITC_1242_00006162- RESP_ITC_1242_00006244
“Nanny-Cam May Leave a Home Exposed,” New York Times, April 14, 2002, available at	RESP_ITC_1242_00005278- RESP_ITC_1242_00005282

Prior Art Reference	Bates Range
https://www.nytimes.com/2002/04/14/business/nanny-cam-may-leave-a-home-exposed.html .	
Duy Nguyen, “Mobile Home Security with GPRS”.	RESP_ITC_1242_00007784- RESP_ITC_1242_00007787
“Scalable Multimedia System for Interactive Surveillance and Video Communication Applications,” IEEE 10th European Signal Processing Conference, September 4-8, 2000, available at https://ieeexplore.ieee.org/document/7075784 .	RESP_ITC_1242_00007788- RESP_ITC_1242_00007791
X10 Wireless Technology, Inc.’s Xcam2, technical user manual, available at http://www.electronicoscaldas.com/datasheet/XCam2-WideEye_X10.pdf .	RESP_ITC_1242_00007694- RESP_ITC_1242_00007695
80211b_Video	RESP_ITC_1242_00007846- RESP_ITC_1242_00007871
Axis 2100 Network Camera Users Guide V.1.2	RESP_ITC_1242_00007872- RESP_ITC_1242_00007929
Axis Communication Press Release_Axis adds wireless capability to its video offerings	RESP_ITC_1242_00007930
[KX-HCM270] Panasonic Network Camera Operating Instructions	RESP_ITC_1242_00008035- RESP_ITC_1242_00008172

2. Prior Art Systems

Prior Art System	Knowledgeable Person(s)
Panasonic Network Cameras, including Model No. KX-HCM270	Panasonic
Axis Network Cameras, including Axis 2100	Axis

B. Anticipation and Obviousness

Respondents attach Exhibits A-1 to A-12, which provide exemplary disclosures showing how the prior art anticipates and/or renders obvious the asserted claims of the ’796 patent. The charts identify primary references, and in some cases, secondary references and obviousness contentions. Respondents also identify secondary references and obviousness contentions in Exhibit A-13. Respondents may rely on any of the primary references identified in Exhibits A-1

to A-12 in combination with any secondary reference identified in those exhibits or in Exhibit A-13. Respondents’ anticipation contentions are presented in the following exhibits, each of which describes anticipation of one or more claims of the ’796 patent by a primary reference:

Exhibit	Primary Reference
A-1	U.S. Patent No. 6,185,294 (“Chornenky”)
A-2	U.S. Patent No. 5,428,388 (“von Bauer”)
A-3	U.S. Patent Pub. 2004/0080615 (“Klein”)
A-4	U.S. Patent No. 7,956,739 (“Hong”)
A-5	U.S. Patent No. 7,015,943 (“Chiang”)
A-6	U.S. Patent No. 8,619,136 (“Howarter”)
A-7	WO 01/93220 (“Menard”)
A-8	U.S. Patent No. 7,583,191 (“Zinser”)
A-9	Panasonic Network Camera Model No. KX-HCM270 (“Panasonic”)
A-10	Axis 2100 Network Camera (“Axis 2100”)
A-11	WO 02/05220 (“Bennett”)
A-12	U.S. Patent No. 4,524,384 (“Lefkowitz”)

Respondents’ obviousness contentions are also contained in Exhibits A-1 to A-12 and Exhibit A-13.

The U.S. Supreme Court in *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) emphasized that inventions arising from ordinary innovation, ordinary skill, or common sense should not be patentable. *Id.* at 1732, 1738, 1742–1743, 1746. A patent claim may be obvious if the combination of elements was obvious to try or if there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent’s claims. When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can

implement a predictable variation, Section 103 likely bars its patentability. *Id.* at 1740. The Court stated that courts should “look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740–41. *KSR* does not mandate evidence of a motivation or suggestion to combine prior art references. *See TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 580–81 (E.D. Tex. 2007). “[A] court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ” to resolve the question of obviousness. *KSR*, 127 S. Ct. at 1741.

Based on all of these considerations, as further detailed in Exhibits A-1 to A-13, persons of ordinary skill in the art would have combined the teachings of the prior art references discussed and charted in those exhibits. The combinations of these references would have rendered obvious to one of ordinary skill in the art the subject matter of the asserted claims of the ’796 patent. The references identified in Exhibits A-1 to A-13 are analogous prior art to the subject matter of the asserted claims and, for at least the reasons set forth below, are properly combinable. Because these prior art references exist within a single field of art, particularly one in which individuals in the field often shared and/or collaborated on their work, it would have been obvious for a person of skill in the art to look from one piece of prior art to another in order to find any missing functionality they desired to implement. Therefore, these references provide interrelated teachings and one of ordinary skill would look to the concepts in any of these references when seeking to solve the problems purportedly addressed by the ’796 patent.

Numerous prior art references, including those identified in the attached exhibits, reflect common knowledge and the state of the prior art before the earliest claimed effective filing date

of the '796 patent. As it would be unduly burdensome to create detailed claim charts for all of the invalidating combinations, for at least the reasons described in these invalidity contentions, it would have been obvious to one of ordinary skill in the art to combine any of a number of prior art references, including any combination of those identified in the attached exhibits, to meet the limitations of the asserted claims of the '796 patent. Respondents' inclusion of exemplary combinations, in view of the factors and motivations identified here, does not preclude Respondents from identifying other invalidating combinations and/or motivations as appropriate.

No showing of a specific motivation to combine prior art is required to combine the references disclosed above and in the attached charts, because each combination of art would have no unexpected results, and at most would simply represent a known alternative to one of ordinary skill in the art. *See KSR*, 127 S. Ct. at 1739–40 (rejecting the Federal Circuit's "rigid" application of the teaching, suggestion, or motivation to combine test, instead espousing an "expansive and flexible" approach). Indeed, the Supreme Court held that a person of ordinary skill in the art is "a person of ordinary creativity, not an automaton" and "in many cases a person of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at 1742. Nevertheless, in addition to the information contained herein, Respondents hereby identify additional motivations and reasons to combine the cited art.

One or more combinations of the prior art references identified herein would have been obvious because these references would have been combined using: known methods to yield predictable results; known techniques in the same way; a simple substitution of one known, equivalent element for another to obtain predictable results; and/or a teaching, suggestion, or motivation in the prior art generally. In addition, it would have been obvious to combine the prior art references identified above because there were only a finite number of predictable solutions

and/or because known work in one field of endeavor prompts variations based on predictable design incentives and/or market forces either in the same field or a different one. In addition, the combinations of the prior art references identified above would have been obvious because the combinations represent the known potential options with a reasonable expectation of success.

Additional evidence that there would have been a motivation or reason to combine the prior art references identified above includes the interrelated teachings of multiple prior art references; the effects of demands known to the design community or present in the marketplace; the existence of a known problem for which there was an obvious solution; the existence of a known need or problem in the field of endeavor at the time of the invention; and the background knowledge that would have been possessed by a person having ordinary skill in the art. For example, the prior art references are generally directed to the same problems. Thus, a skilled artisan seeking to solve these problems would look to these cited references in combination.

Thus, the motivation or reason to combine the teachings of the prior art references disclosed herein is found in the references themselves and in: (1) the nature of the problems being solved; (2) the express, implied, and inherent teachings of the prior art; (3) the knowledge of persons of ordinary skill in the art; (4) the fact that the prior art is generally directed towards the same problems; and/or (5) the predictable results obtained in combining the different elements of the prior art; (6) the use of a known technique to improve similar devices, methods, or products in the same way; (7) the predictable results obtained in applying a known technique to a known device, method, or product ready for improvement; (8) the finite number of identified predictable solutions that had a reasonable expectation of success; and (9) known work in various technological fields that could be applied to the same or different technological fields based on design incentives or other market forces.

In addition, it would have obvious to combine any of the prior art in Exhibits A-1 to A-12 and Exhibit A-13 because all of these references relate to devices and methods relating to networked video transmission and home automation in routine and predictable ways.

Respondents incorporate by reference prior art from the prosecution histories and background sections of the '796 patent. Respondents expect to rely on the testimony of one or more expert witnesses and documents referenced by those expert witnesses in support of these contentions and incorporate those forthcoming expert reports as if fully set forth herein.

Respondents contend that there are no secondary considerations of non-obviousness evidencing the validity of any of the asserted claims. Secondary considerations of non-obviousness, also referred to as objective indicia of non-obviousness, “can include copying, long felt but unsolved need, failure of others, commercial success, unexpected results created by the claimed invention, unexpected properties of the claimed invention, licenses showing industry respect for the invention, awards or other industry praise for the invention, and skepticism of skilled artisans before the invention.” *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1368 (Fed. Cir. 2013). “A nexus between the merits of the claimed invention and evidence of secondary considerations is required in order for the evidence to be given substantial weight in an obviousness decision.” *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 668 (Fed. Cir. 2000). Moreover, even if a nexus exists, secondary considerations of non-obviousness “simply cannot overcome [a] strong prima facie showing of obviousness.” *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1368 (Fed. Cir. 2008). Complainants have not established the existence of any objective indicia of non-obviousness or secondary considerations. Respondents reserve the right to supplement their contentions to respond to any such evidence should Complainants be permitted to raise them in the future. While discovery in

this case is ongoing, and Respondents' investigation continues (which will include expert discovery), to the extent Complainants contend that one or more asserted claims is not obvious based on secondary considerations recognized by relevant authority Respondents contend such allegations are without merit. For example, Complainants have provided no evidence of copying of the purported inventions of the asserted claims.

Complainants also have not identified any evidence that the purported inventions of the asserted claims have enjoyed any commercial success. Similarly, Complainants have provided no evidence of any failure of others to realize any purported inventions of the asserted claims, or any evidence of any long felt but unsolved need solved by the purported inventions of the asserted claims. To the contrary, the relative novelty and widespread availability of video doorbell technology is contrary evidence of any long-felt need for the purported inventions of the asserted claims.

C. Other Invalidity Grounds

Respondents hereby identify grounds of invalidity based on (1) lack of written description under 35 U.S.C. § 112(a); (2) lack of enablement under 35 U.S.C. § 112(a); and (3) indefiniteness under 35 U.S.C. § 112 (b). These contentions shall not be construed as an admission that any claim construction advanced by Respondents in this case is in any way inconsistent, flawed, or erroneous. Nor should these contentions prevent Respondents from advancing claim construction and/or non-infringement positions in lieu of, or in addition to, invalidity positions. Further, these contentions shall not be construed as an admission of or acquiescence to Complainants' purported construction of the claim language or of other positions advanced by Complainants during the course of this litigation. Respondents' Invalidity Contentions under 35 U.S.C. § 112 may depend, in part, on the Court's claim construction, as well as Complainants' alleged scope of the asserted

claims of the '796 patent. Consequently, Respondents only identify the issues under 35 U.S.C. § 112 of which they are presently aware.

1. Enablement and/or Written Description Pursuant to 35 U.S.C. § 112(a)

The '796 patent does not provide sufficient written description to establish that the alleged inventors were in possession of the alleged inventions recited in certain of the asserted claims of the '796 patent at the time the '796 patent was filed. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). In other words, the applicants did not describe their purported inventions in a manner that “reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* The specification of the '796 patent also does not enable one of ordinary skill in the art to make and/or use certain recited elements of the asserted claims of the '796 patent without undue experimentation.

To the extent the following limitations are definite (under 35 U.S.C. § 112, second paragraph), the '796 patent fails to sufficiently describe or enable them as required by 35 U.S.C. § 112, first paragraph: “displaying a notification that the person has been detected at the entrance;” “wherein the graphical user interface displays one or more icons when the person is detected by the exterior device”; “a proximity sensor for detecting the person at the entrance”; “receiving a person at an entrance”; and “real time”. Respondents also incorporate by reference Section XIII below.

2. Indefiniteness Pursuant to 35 U.S.C. § 112(b)

Several of the asserted claims of the '796 patent are invalid because they fail to inform those skilled in the art about the scope of the alleged invention with reasonable certainty and are indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter the applicants regard as their alleged invention.

For example, claim 3 of the '796 patent is invalid because it covers both a system and a method. The second element after the preamble of claim 3, a system claim, recites “an exterior module, comprising.” At least the phrases “a video camera that captures video of the person at the entrance,” “a microphone that receives audio from the person at the entrance,” “an RF transmitter that transmits, to the software application, digital streaming video that a user of the remote peripheral device may view in real time,” “an RF receiver that receives audio from the peripheral device,” and “a speaker that outputs the audio received by the RF receiver” show that actions are required to be performed by the “exterior module.” The claim therefore requires a system and an “exterior module” to perform the method steps of “captur[ing] video of the person at the entrance,” “receiv[ing] audio from the person at the entrance,” “transmit[ting] . . . digital streaming video,” “receiv[ing] audio from the peripheral device,” and “output[ting] the audio received.”

VI. U.S. PATENT NO. 10,200,660

A. Relevant Prior Art

Respondents contend that the prior art references identified in Respondents' contentions anticipate or render obvious the asserted claims. Based on the information reasonably available to Respondents, the priority date of the asserted claims of the '660 patent is no earlier than December 29, 2006, the filing date of the '581 patent to which the '660 patent claims priority. The '581 patent is a continuation-in-part of the '644 patent and introduced new matter. Despite having the burden of proof, Complainants have offered no evidence that any asserted claim of the '660 patent is entitled to a priority date earlier than December 29, 2006. Below, Respondents list some of the prior art cited in these contentions:

1. Patents and Printed Publications

Prior Art Reference	Bates Range
U.S. Patent No. 3,480,727 to Moore	RESP_ITC_1242_00007696- RESP_ITC_1242_00007704

Prior Art Reference	Bates Range
U.S. Patent No. 4,075,659 to Desanti	RESP_ITC_1242_00007705- RESP_ITC_1242_00007711
U.S. Patent No. 4,370,675 to Cohn	RESP_ITC_1242_00007712- RESP_ITC_1242_00007719
U.S. Patent No. 4,524,384 to Lefkowitz	RESP_ITC_1242_00007720- RESP_ITC_1242_00007732
U.S. Patent No. 4,764,953 to Chern	RESP_ITC_1242_00007733- RESP_ITC_1242_00007741
U.S. Patent No. 4,843,461 to Tatsumi	RESP_ITC_1242_00007742- RESP_ITC_1242_00007757
U.S. Patent No. 4,959,713 to Morotomi	RESP_ITC_1242_00007758- RESP_ITC_1242_00007774
U.S. Patent No. 5,151,945 to Lee	RESP_ITC_1242_00006781- RESP_ITC_1242_00006794
U.S. Patent No. 5,428,388 to von Bauer	RESP_ITC_1242_00007474- RESP_ITC_1242_00007498
U.S. Patent No. 5,717,379 to Peters	RESP_ITC_1242_00003087- RESP_ITC_1242_00003093
U.S. Patent No. 5,822,542 to Smith	RESP_ITC_1242_00005889- RESP_ITC_1242_00006097
U.S. Patent No. 5,861,804 to Fansa	RESP_ITC_1242_00006795- RESP_ITC_1242_00006803
U.S. Patent No. 5,878,283 to House	RESP_ITC_1242_00006804- RESP_ITC_1242_00006825
U.S. Patent No. 6,060,994 to Chen	RESP_ITC_1242_00007499- RESP_ITC_1242_00007513
U.S. Patent No. 6,064,303 to Klein	RESP_ITC_1242_00006826- RESP_ITC_1242_00006840
U.S. Patent No. 6,069,655 to Seeley	RESP_ITC_1242_00003234- RESP_ITC_1242_00003257
U.S. Patent No. 6,097,429 to Seeley	RESP_ITC_1242_00006841- RESP_ITC_1242_00006855
U.S. Patent No. 6,104,785 to Chen	RESP_ITC_1242_00007514- RESP_ITC_1242_00007521
U.S. Patent No. 6,134,303 to Chen	RESP_ITC_1242_00007522- RESP_ITC_1242_00007529
U.S. Patent No. 6,185,294 to Chornenky	RESP_ITC_1242_00007530- RESP_ITC_1242_00007540
U.S. Patent No. 6,323,897 to Kogane	RESP_ITC_1242_00006098- RESP_ITC_1242_00006109
U.S. Patent No. 6,359,560 to Budge	RESP_ITC_1242_00006110- RESP_ITC_1242_00006127
U.S. Patent No. 6,385,772 to Courtney	RESP_ITC_1242_00003405- RESP_ITC_1242_00003413

Prior Art Reference	Bates Range
U.S. Patent No. 6,400,265 to Saylor	RESP_ITC_1242_00006856- RESP_ITC_1242_00006883
U.S. Patent No. 6,421,080 to Lambert	RESP_ITC_1242_00006884- RESP_ITC_1242_00006893
U.S. Patent No. 6,424,371 to Wen	RESP_ITC_1242_00006894- RESP_ITC_1242_00006905
U.S. Patent No. 6,476,858 to Diaz	RESP_ITC_1242_00006128- RESP_ITC_1242_00006145
U.S. Patent No. 6,542,078 to Script	RESP_ITC_1242_00007541- RESP_ITC_1242_00007557
U.S. Patent No. 6,816,085 to Haynes	RESP_ITC_1242_00006906- RESP_ITC_1242_00006923
U.S. Patent No. 6,828,909 to Script	RESP_ITC_1242_00007558- RESP_ITC_1242_00007586
U.S. Patent No. 6,943,682 to Dowens	RESP_ITC_1242_00003831- RESP_ITC_1242_00003841
U.S. Patent No. 6,956,478 to Oyagi	RESP_ITC_1242_00006924- RESP_ITC_1242_00006971
U.S. Patent No. 7,012,523 to Stuart	RESP_ITC_1242_00004004- RESP_ITC_1242_00004014
U.S. Patent No. 7,015,943 to Chiang	RESP_ITC_1242_00004040- RESP_ITC_1242_00004054
U.S. Patent No. 7,019,770 to Katz	RESP_ITC_1242_00004072- RESP_ITC_1242_00004100
U.S. Patent No. 7,113,090 to Saylor	RESP_ITC_1242_00007587- RESP_ITC_1242_00007626
U.S. Patent No. 7,119,609 to Naidoo	RESP_ITC_1242_00007627- RESP_ITC_1242_00007646
U.S. Patent No. 7,123,142 to Bohbot	RESP_ITC_1242_00008184- RESP_ITC_1242_00008201
U.S. Patent No. 7,187,279 to Chung	RESP_ITC_1242_00008202- RESP_ITC_1242_00008225
U.S. Patent No. 7,193,644 to Carter	RESP_ITC_1242_00004259- RESP_ITC_1242_00004272
U.S. Patent No. 7,242,295 to Milinusic	RESP_ITC_1242_00004273- RESP_ITC_1242_00004316
U.S. Patent No. 7,262,690 to Heaton	RESP_ITC_1242_00008226- RESP_ITC_1242_00008244
U.S. Patent No. 7,277,010 to Joao	RESP_ITC_1242_00004322- RESP_ITC_1242_00004411
U.S. Patent No. 7,310,111 to Ramirez-Diaz	RESP_ITC_1242_00008017- RESP_ITC_1242_00008034
U.S. Patent No. 7,403,116 to Bittner	RESP_ITC_1242_00008245- RESP_ITC_1242_00008256

Prior Art Reference	Bates Range
U.S. Patent No. 7,529,485 to Farmer	RESP_ITC_1242_00008257- RESP_ITC_1242_00008311
U.S. Patent No. 7,609,941 to Matsukawa	RESP_ITC_1242_00008312- RESP_ITC_1242_00008364
U.S. Patent No. 7,786,891 to Owens	RESP_ITC_1242_00008365- RESP_ITC_1242_00008383
U.S. Patent No. 7,952,609 to Simerly	RESP_ITC_1242_00008384- RESP_ITC_1242_00008409
U.S. Patent No. 7,956,739 to Hong	RESP_ITC_1242_00008410- RESP_ITC_1242_00008428
U.S. Patent No. 8,154,581 to Carter	RESP_ITC_1242_00007386- RESP_ITC_1242_00007409
U.S. Patent No. 8,164,614 to Carter	RESP_ITC_1242_00007410- RESP_ITC_1242_00007434
U.S. Patent No. 8,520,068 to Naidoo	RESP_ITC_1242_00004713- RESP_ITC_1242_00004735
U.S. Patent No. 8,619,136 to Howarter	RESP_ITC_1242_00008429- RESP_ITC_1242_00008445
U.S. Patent No. 8,948,245 to Henson	RESP_ITC_1242_00008446- RESP_ITC_1242_00008519
U.S. Patent No. 9,250,267 to Jackson	RESP_ITC_1242_00006146- RESP_ITC_1242_00006161
U.S. Patent No. 9,300,921 to Naidoo	RESP_ITC_1242_00007647- RESP_ITC_1242_00007670
U.S. Patent No. 9,579,913 to Menard	RESP_ITC_1242_00007944- RESP_ITC_1242_00008016
Published U.S. App. 2002/0016971 to Berezowski	RESP_ITC_1242_00005283- RESP_ITC_1242_00005325
Published U.S. App. 2002/0030583 to Jang	RESP_ITC_1242_00001473- RESP_ITC_1242_00001479
Published U.S. App. 2002/0067259 to Fufidio	RESP_ITC_1242_00005326- RESP_ITC_1242_00005343
Published U.S. App. 2002/0071031 to Lord	RESP_ITC_1242_00006721- RESP_ITC_1242_00006728
Published U.S. App. 2002/0075307 to Alexander	RESP_ITC_1242_00001493- RESP_ITC_1242_00001520
Published U.S. App. 2002/0076049 to Boykin	RESP_ITC_1242_00006729- RESP_ITC_1242_00006741
Published U.S. App. 2002/0118283 to Guerrero	RESP_ITC_1242_00001541- RESP_ITC_1242_00001567
Published U.S. App. 2002/0147982 to Naidoo	RESP_ITC_1242_00001568- RESP_ITC_1242_00001591
Published U.S. App. 2003/0046557 to Miller	RESP_ITC_1242_00005344- RESP_ITC_1242_00005387

Prior Art Reference	Bates Range
Published U.S. App. 2003/0061344 to Monroe	RESP_ITC_1242_00005451- RESP_ITC_1242_00005597
Published U.S. App. 2003/0062997 to Naidoo	RESP_ITC_1242_00006742- RESP_ITC_1242_00006764
Published U.S. App. 2003/0071724 to D'Amico	RESP_ITC_1242_00007443- RESP_ITC_1242_00007458
Published U.S. App. 2003/0075287 to Weik	RESP_ITC_1242_00005388- RESP_ITC_1242_00005405
Published U.S. App. 2003/0081747 to Ahlstrom	RESP_ITC_1242_00005406- RESP_ITC_1242_00005419
Published U.S. App. 2003/0095184 to Lin	RESP_ITC_1242_00001744- RESP_ITC_1242_00001749
Published U.S. App. 2003/0095185 to Naifeh	RESP_ITC_1242_00001750- RESP_ITC_1242_00001771
Published U.S. App. 2003/0103138 to Assayag	RESP_ITC_1242_00005420- RESP_ITC_1242_00005429
Published U.S. App. 2003/0122514 to Mercier	RESP_ITC_1242_00001772- RESP_ITC_1242_00001780
U.S. Patent Publication. No. 2003/0117280 to Prehn	RESP_ITC_1242_00008173- RESP_ITC_1242_00008183
Published U.S. App. 2003/0171930 to Junqua	RESP_ITC_1242_00005430- RESP_ITC_1242_00005442
Published U.S. App. 2003/0206101 to Dixon	RESP_ITC_1242_00005443- RESP_ITC_1242_00005450
Published U.S. App. 2004/0003051 to Krzyanowski	RESP_ITC_1242_00005598- RESP_ITC_1242_00005622
Published U.S. App. 2004/0036603 to Bingham	RESP_ITC_1242_00006765- RESP_ITC_1242_00006780
Published U.S. App. 2004/0080615 to Klein	RESP_ITC_1242_00001858- RESP_ITC_1242_00001867
Published U.S. App. 2004/0080627 to Kroll	RESP_ITC_1242_00001868- RESP_ITC_1242_00001885
Published U.S. App. 2005/0001717 to Bohbot	RESP_ITC_1242_00002049- RESP_ITC_1242_00002067
Published U.S. App. 2005/0165612 to Van Rysselberghe	RESP_ITC_1242_00002127- RESP_ITC_1242_00002142
Published U.S. App. 2006/0095539 to Renkis	RESP_ITC_1242_00005630- RESP_ITC_1242_00005651
Published U.S. App. 2006/0171453 to Rohlfing	RESP_ITC_1242_00005652- RESP_ITC_1242_00005693
Published U.S. App. 2007/0162748 to Okayama	RESP_ITC_1242_00007792- RESP_ITC_1242_00007845
Published U.S. App. 2009/0224912 to Sobol	RESP_ITC_1242_00002862- RESP_ITC_1242_00002867

Prior Art Reference	Bates Range
Published U.S. App. 2006/0255931 to Hartsfield	RESP_ITC_1242_00005694- RESP_ITC_1242_00005727
Published U.S. App. 2019/0058720 to Lindquist	RESP_ITC_1242_00007459- RESP_ITC_1242_00007473
U.S. Pat. Pub. No. 2005/0285934 to Carter	RESP_ITC_1242_00002160- RESP_ITC_1242_00002173
U.S. Pat. Pub. No. 2007/0103548 to Carter	RESP_ITC_1242_00005776- RESP_ITC_1242_00005800
U.S. Pat. Pub. No. 2008/0117299 to Carter	RESP_ITC_1242_00002809- RESP_ITC_1242_00002833
Canadian Patent No. 2228679 to Heggie	RESP_ITC_1242_00006698- RESP_ITC_1242_00006720
French Patent No. FR 2759804 to Bonsaglio	RESP_ITC_1242_00001331- RESP_ITC_1242_00001347
United Kingdom Patent Application No. GB2285365 to Yau	RESP_ITC_1242_00001348- RESP_ITC_1242_00001373
Japan Patent No. JPH 09-107409	RESP_ITC_1242_00007775- RESP_ITC_1242_00007783
Korea Patent No. KR 100373449 to Son	RESP_ITC_1242_00001391- RESP_ITC_1242_00001408
Korea Patent No. KR 19980039422 to Sunghwa Kim Won- joon	RESP_ITC_1242_00001417- RESP_ITC_1242_00001421
Korea Patent No. KR 20010074212 to Shin	RESP_ITC_1242_00001422- RESP_ITC_1242_00001425
International Patent No. WO 99/06976 to Meyvis	RESP_ITC_1242_00006972- RESP_ITC_1242_00006995
International Patent No. WO 01/27763 to Simerly	RESP_ITC_1242_00006996- RESP_ITC_1242_00007042
International Patent No. WO 01/50731 to Noyman	RESP_ITC_1242_00005004- RESP_ITC_1242_00005038
International Patent No. WO 01/93220 to Menard	RESP_ITC_1242_00005039- RESP_ITC_1242_00005131
International Patent No. WO 01/097524 to Scaman	RESP_ITC_1242_00006454- RESP_ITC_1242_00006486
International Patent No. WO 02/005220 to Bennett	RESP_ITC_1242_00005132- RESP_ITC_1242_00005152
International Patent No. WO 02/065420 to Vojtech	RESP_ITC_1242_00006487- RESP_ITC_1242_00006509
International Patent No. WO 03/028375 to Hong	RESP_ITC_1242_00007043- RESP_ITC_1242_00007075
International Patent No. WO 2006/046234 to Segel	RESP_ITC_1242_00008520- RESP_ITC_1242_00008521

Prior Art Reference	Bates Range
“Motion Activated Video Surveillance Using TI DSP,” Carnegie Mellon University, August 4-6, 1999, available at https://www.ti.com/sc/docs/general/dsp/fest99/avi/1paper.pdf .	RESP_ITC_1242_00005272- RESP_ITC_1242_00005277
“Video Surveillance Equipment Selection and Application Guide,” NIJ Guide 201-99, October 1999, available at https://www.ojp.gov/pdffiles1/nij/179545.pdf .	RESP_ITC_1242_00006162- RESP_ITC_1242_00006244
“Nanny-Cam May Leave a Home Exposed,” New York Times, April 14, 2002, available at https://www.nytimes.com/2002/04/14/business/nanny-cam-may-leave-a-home-exposed.html .	RESP_ITC_1242_00005278- RESP_ITC_1242_00005282
Duy Nguyen, “Mobile Home Security with GPRS”.	RESP_ITC_1242_00007784- RESP_ITC_1242_00007787
“Scalable Multimedia System for Interactive Surveillance and Video Communication Applications,” IEEE 10th European Signal Processing Conference, September 4-8, 2000, available at https://ieeexplore.ieee.org/document/7075784 .	RESP_ITC_1242_00007788- RESP_ITC_1242_00007791
X10 Wireless Technology, Inc.’s Xcam2, technical user manual, available at http://www.electronicoscaldas.com/datasheet/XCam2-WideEye_X10.pdf .	RESP_ITC_1242_00007694- RESP_ITC_1242_00007695
80211b_Video	RESP_ITC_1242_00007846- RESP_ITC_1242_00007871
Axis 2100 Network Camera Users Guide V.1.2	RESP_ITC_1242_00007872- RESP_ITC_1242_00007929
Axis Communication Press Release_Axis adds wireless capability to its video offerings	RESP_ITC_1242_00007930
[KX-HCM270] Panasonic Network Camera Operating Instructions	RESP_ITC_1242_00008035- RESP_ITC_1242_00008172

2. Prior Art Systems

Prior Art System	Knowledgeable Person(s)
Panasonic Network Cameras, including Model No. KX-HCM270	Panasonic
Axis Network Cameras, including Axis 2100	Axis

B. Anticipation and Obviousness

Respondents attach Exhibits B-1 to B-12, which provide exemplary disclosures showing how the prior art anticipates and/or renders obvious the asserted claims of the ’660 patent. The

charts identify primary references, and in some cases, secondary references and obviousness contentions. Respondents also identify secondary references and obviousness contentions in Exhibit B-13. Respondents may rely on any of the primary references identified in Exhibits B-1 to B-12 in combination with any secondary reference identified in those exhibits or in Exhibit B-13. Respondents’ anticipation contentions are presented in the following exhibits, each of which describes anticipation of one or more claims of the ’660 patent by a primary reference:

Exhibit	Primary Reference
B-1	U.S. Patent No. 6,185,294 (“Chornenky”)
B-2	U.S. Patent No. 5,428,388 (“von Bauer”)
B-3	U.S. Patent Pub. 2004/0080615 (“Klein”)
B-4	U.S. Patent No. 7,956,739 (“Hong”)
B-5	U.S. Patent No. 7,015,943 (“Chiang”)
B-6	U.S. Patent No. 8,619,136 (“Howarter”)
B-7	WO 01/93220 (“Menard”)
B-8	U.S. Patent No. 7,583,191 (“Zinser”)
B-9	Panasonic Network Camera Model No. KX-HCM270 (“Panasonic”)
B-10	Axis 2100 Network Camera (“Axis 2100”)
B-11	WO 02/05220 (“Bennett”)
B-12	U.S. Patent No. 4,524,384 (“Lefkowitz”)

Respondents’ obviousness contentions are also contained in Exhibits B-1 to B-12 and Exhibit B-13.

The U.S. Supreme Court in *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) emphasized that inventions arising from ordinary innovation, ordinary skill, or common sense should not be patentable. *Id.* at 1732, 1738, 1742–1743, 1746. A patent claim may be obvious if the combination of elements was obvious to try or if there existed at the time of the invention a

known problem for which there was an obvious solution encompassed by the patent's claims. When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, Section 103 likely bars its patentability. *Id.* at 1740. The Court stated that courts should “look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740–41. *KSR* does not mandate evidence of a motivation or suggestion to combine prior art references. *See TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 580–81 (E.D. Tex. 2007). “[A] court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ” to resolve the question of obviousness. *KSR*, 127 S. Ct. at 1741.

Based on all of these considerations, as further detailed in Exhibits B-1 to B-12 and Exhibit B-13, persons of ordinary skill in the art would have combined the teachings of the prior art references discussed and charted in those exhibits. The combinations of these references would have rendered obvious to one of ordinary skill in the art the subject matter of the asserted claims of the '660 patent. The references identified in Exhibits B-1 to B-12 and Exhibit B-13 are analogous prior art to the subject matter of the asserted claims and, for at least the reasons set forth below, are properly combinable. Because these prior art references exist within a single field of art, particularly one in which individuals in the field often shared and/or collaborated on their work, it would have been obvious for a person of skill in the art to look from one piece of prior art to another in order to find any missing functionality they desired to implement. Therefore, these references provide interrelated teachings and one of ordinary skill would look to the concepts in

any of these references when seeking to solve the problems purportedly addressed by the '660 patent.

Numerous prior art references, including those identified in the attached exhibits, reflect common knowledge and the state of the prior art before the earliest claimed effective filing date of the '660 patent. As it would be unduly burdensome to create detailed claim charts for all of the invalidating combinations, for at least the reasons described in these invalidity contentions, it would have been obvious to one of ordinary skill in the art to combine any of a number of prior art references, including any combination of those identified in the attached exhibits, to meet the limitations of the asserted claims of the '660 patent. Respondents' inclusion of exemplary combinations, in view of the factors and motivations identified here, does not preclude Respondents from identifying other invalidating combinations and/or motivations as appropriate.

No showing of a specific motivation to combine prior art is required to combine the references disclosed above and in the attached charts, because each combination of art would have no unexpected results, and at most would simply represent a known alternative to one of ordinary skill in the art. *See KSR*, 127 S. Ct. at 1739–40 (rejecting the Federal Circuit's "rigid" application of the teaching, suggestion, or motivation to combine test, instead espousing an "expansive and flexible" approach). Indeed, the Supreme Court held that a person of ordinary skill in the art is "a person of ordinary creativity, not an automaton" and "in many cases a person of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at 1742. Nevertheless, in addition to the information contained herein, Respondents hereby identify additional motivations and reasons to combine the cited art.

One or more combinations of the prior art references identified herein would have been obvious because these references would have been combined using: known methods to yield

predictable results; known techniques in the same way; a simple substitution of one known, equivalent element for another to obtain predictable results; and/or a teaching, suggestion, or motivation in the prior art generally. In addition, it would have been obvious to combine the prior art references identified above because there were only a finite number of predictable solutions and/or because known work in one field of endeavor prompts variations based on predictable design incentives and/or market forces either in the same field or a different one. In addition, the combinations of the prior art references identified above would have been obvious because the combinations represent the known potential options with a reasonable expectation of success.

Additional evidence that there would have been a motivation or reason to combine the prior art references identified above includes the interrelated teachings of multiple prior art references; the effects of demands known to the design community or present in the marketplace; the existence of a known problem for which there was an obvious solution; the existence of a known need or problem in the field of endeavor at the time of the invention; and the background knowledge that would have been possessed by a person having ordinary skill in the art. For example, the prior art references are generally directed to the same problems. Thus, a skilled artisan seeking to solve these problems would look to these cited references in combination.

Thus, the motivation or reason to combine the teachings of the prior art references disclosed herein is found in the references themselves and in: (1) the nature of the problems being solved; (2) the express, implied, and inherent teachings of the prior art; (3) the knowledge of persons of ordinary skill in the art; (4) the fact that the prior art is generally directed towards the same problems; and/or (5) the predictable results obtained in combining the different elements of the prior art; (6) the use of a known technique to improve similar devices, methods, or products in the same way; (7) the predictable results obtained in applying a known technique to a known device,

method, or product ready for improvement; (8) the finite number of identified predictable solutions that had a reasonable expectation of success; and (9) known work in various technological fields that could be applied to the same or different technological fields based on design incentives or other market forces.

In addition, it would have obvious to combine any of the prior art in Exhibits B-1 to B-12 and Exhibit B-13 because all of these references relate to devices and methods relating to networked video transmission and home automation in routine and predictable ways.

Respondents incorporate by reference prior art from the prosecution histories and background sections of the '660 patent. Respondents expect to rely on the testimony of one or more expert witnesses and documents referenced by those expert witnesses in support of these contentions and incorporate those forthcoming expert reports as if fully set forth herein.

Respondents contend that there are no secondary considerations of non-obviousness evidencing the validity of any of the asserted claims. Secondary considerations of non-obviousness, also referred to as objective indicia of non-obviousness, “can include copying, long felt but unsolved need, failure of others, commercial success, unexpected results created by the claimed invention, unexpected properties of the claimed invention, licenses showing industry respect for the invention, awards or other industry praise for the invention, and skepticism of skilled artisans before the invention.” *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1368 (Fed. Cir. 2013). “A nexus between the merits of the claimed invention and evidence of secondary considerations is required in order for the evidence to be given substantial weight in an obviousness decision.” *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 668 (Fed. Cir. 2000). Moreover, even if a nexus exists, secondary considerations of non-obviousness “simply cannot overcome [a] strong prima facie showing of obviousness.” *Sundance, Inc. v.*

DeMonte Fabricating Ltd., 550 F.3d 1356, 1368 (Fed. Cir. 2008). Complainants have not established the existence of any objective indicia of non-obviousness or secondary considerations. Respondents reserve the right to supplement their contentions to respond to any such evidence should Complainants be permitted to raise them in the future. While discovery in this case is ongoing, and Respondents' investigation continues (which will include expert discovery), to the extent Complainants contend that one or more asserted claims is not obvious based on secondary considerations recognized by relevant authority Respondents contend such allegations are without merit. For example, Complainants have provided no evidence of copying of the purported inventions of the asserted claims.

Complainants also have not identified any evidence that the purported inventions of the asserted claims have enjoyed any commercial success. Similarly, Complainants have provided no evidence of any failure of others to realize any purported inventions of the asserted claims, or any evidence of any long felt but unsolved need solved by the purported inventions of the asserted claims. To the contrary, the relative novelty and widespread availability of video doorbell technology is contrary evidence of any long-felt need for the purported inventions of the asserted claims.

C. Other Invalidity Grounds

Respondents hereby identify grounds of invalidity based on (1) lack of written description under 35 U.S.C. § 112(a); (2) lack of enablement under 35 U.S.C. § 112(a); and (3) indefiniteness under 35 U.S.C. § 112 (b). These contentions shall not be construed as an admission that any claim construction advanced by Respondents in this case is in any way inconsistent, flawed, or erroneous. Nor should these contentions prevent Respondents from advancing claim construction and/or non-infringement positions in lieu of, or in addition to, invalidity positions. Further, these

contentions shall not be construed as an admission of or acquiescence to Complainants' purported construction of the claim language or of other positions advanced by Complainants during the course of this litigation. Respondents' Invalidity Contentions under 35 U.S.C. § 112 may depend, in part, on the Court's claim construction, as well as Complainants' alleged scope of the asserted claims of the '660 patent. Consequently, Respondents only identify the issues under 35 U.S.C. § 112 of which they are presently aware.

1. Enablement and/or Written Description Pursuant to 35 U.S.C. § 112(a)

The '660 patent does not provide sufficient written description to establish that the alleged inventors were in possession of the alleged inventions recited in certain of the asserted claims of the '660 patent at the time the '660 patent was filed. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). In other words, the applicants did not describe their purported inventions in a manner that “reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* The specification of the '660 patent also does not enable one of ordinary skill in the art to make and/or use certain recited elements of the asserted claims of the '660 patent without undue experimentation.

To the extent the following limitations are definite (under 35 U.S.C. § 112, second paragraph), the '660 patent fails to sufficiently describe or enable them as required by 35 U.S.C. § 112, first paragraph: “wherein the exterior device is capable of receiving the digital audio from a peripheral device after a person associated with the entrance has been detected”; “wherein the exterior device is capable of modifying the sensitivity of the motion detector upon receiving a request to do so”; “operating in at least one low light condition”; “a sensitivity of the motion detector”; “receiving audio at the interior device that was captured by a peripheral device, which is a cell phone”; “displaying an icon and the streaming video at the same time on the peripheral

device”; “wherein the icon, when selected, allows a user to speak to the person”; “a person associated with the entrance”; “wirelessly transmitting streaming video from an interior device upon detection of a person”; “storing the streaming video and digital audio in a database and associating the interior device with the stored streaming video and digital audio”; “replicating at least a portion of the database on one or more computers”; and “providing a storage hierarchy for the streaming video and digital audio stored in the database.” Respondents also incorporate by reference Section XIII below.

2. Indefiniteness Pursuant to 35 U.S.C. § 112(b)

Several of the asserted claims of the ’660 patent are invalid because they fail to inform those skilled in the art about the scope of the alleged invention with reasonable certainty and are indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter the applicants regard as their alleged invention.

Certain asserted claims of the ’660 patent are invalid as indefinite due to the following limitations which fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention: “wherein the exterior device is capable of operating in at least one low light condition.”

VII. U.S. PATENT NO. 10,523,906

A. Relevant Prior Art

Respondents contend that the prior art references identified in Respondents’ contentions anticipate or render obvious the asserted claims. Based on the information reasonably available to Respondents, the priority date of the asserted claims of the ’906 patent is no earlier than December 29, 2006, the filing date of the ’581 patent to which the ’906 patent claims priority. The ’581 patent is a continuation-in-part of the ’644 patent and introduced new matter. Despite having the burden of proof, Complainants have offered no evidence that any asserted claim of the ’906 patent

is entitled to a priority date earlier than December 29, 2006. Below, Respondents list some of the prior art cited in these contentions:

1. Patents and Printed Publications

Prior Art Reference	Bates Range
U.S. Patent No. 3,480,727 to Moore	RESP_ITC_1242_00007696- RESP_ITC_1242_00007704
U.S. Patent No. 4,075,659 to Desanti	RESP_ITC_1242_00007705- RESP_ITC_1242_00007711
U.S. Patent No. 4,370,675 to Cohn	RESP_ITC_1242_00007712- RESP_ITC_1242_00007719
U.S. Patent No. 4,524,384 to Lefkowitz	RESP_ITC_1242_00007720- RESP_ITC_1242_00007732
U.S. Patent No. 4,764,953 to Chern	RESP_ITC_1242_00007733- RESP_ITC_1242_00007741
U.S. Patent No. 4,843,461 to Tatsumi	RESP_ITC_1242_00007742- RESP_ITC_1242_00007757
U.S. Patent No. 4,959,713 to Morotomi	RESP_ITC_1242_00007758- RESP_ITC_1242_00007774
U.S. Patent No. 5,151,945 to Lee	RESP_ITC_1242_00006781- RESP_ITC_1242_00006794
U.S. Patent No. 5,428,388 to von Bauer	RESP_ITC_1242_00007474- RESP_ITC_1242_00007498
U.S. Patent No. 5,717,379 to Peters	RESP_ITC_1242_00003087- RESP_ITC_1242_00003093
U.S. Patent No. 5,822,542 to Smith	RESP_ITC_1242_00005889- RESP_ITC_1242_00006097
U.S. Patent No. 5,861,804 to Fansa	RESP_ITC_1242_00006795- RESP_ITC_1242_00006803
U.S. Patent No. 5,878,283 to House	RESP_ITC_1242_00006804- RESP_ITC_1242_00006825
U.S. Patent No. 6,060,994 to Chen	RESP_ITC_1242_00007499- RESP_ITC_1242_00007513
U.S. Patent No. 6,064,303 to Klein	RESP_ITC_1242_00006826- RESP_ITC_1242_00006840
U.S. Patent No. 6,069,655 to Seeley	RESP_ITC_1242_00003234- RESP_ITC_1242_00003257
U.S. Patent No. 6,097,429 to Seeley	RESP_ITC_1242_00006841- RESP_ITC_1242_00006855
U.S. Patent No. 6,104,785 to Chen	RESP_ITC_1242_00007514- RESP_ITC_1242_00007521
U.S. Patent No. 6,134,303 to Chen	RESP_ITC_1242_00007522- RESP_ITC_1242_00007529

Prior Art Reference	Bates Range
U.S. Patent No. 6,185,294 to Chornenky	RESP_ITC_1242_00007530- RESP_ITC_1242_00007540
U.S. Patent No. 6,323,897 to Kogane	RESP_ITC_1242_00006098- RESP_ITC_1242_00006109
U.S. Patent No. 6,359,560 to Budge	RESP_ITC_1242_00006110- RESP_ITC_1242_00006127
U.S. Patent No. 6,385,772 to Courtney	RESP_ITC_1242_00003405- RESP_ITC_1242_00003413
U.S. Patent No. 6,400,265 to Saylor	RESP_ITC_1242_00006856- RESP_ITC_1242_00006883
U.S. Patent No. 6,421,080 to Lambert	RESP_ITC_1242_00006884- RESP_ITC_1242_00006893
U.S. Patent No. 6,424,371 to Wen	RESP_ITC_1242_00006894- RESP_ITC_1242_00006905
U.S. Patent No. 6,476,858 to Diaz	RESP_ITC_1242_00006128- RESP_ITC_1242_00006145
U.S. Patent No. 6,542,078 to Script	RESP_ITC_1242_00007541- RESP_ITC_1242_00007557
U.S. Patent No. 6,816,085 to Haynes	RESP_ITC_1242_00006906- RESP_ITC_1242_00006923
U.S. Patent No. 6,828,909 to Script	RESP_ITC_1242_00007558- RESP_ITC_1242_00007586
U.S. Patent No. 6,943,682 to Dowens	RESP_ITC_1242_00003831- RESP_ITC_1242_00003841
U.S. Patent No. 6,956,478 to Oyagi	RESP_ITC_1242_00006924- RESP_ITC_1242_00006971
U.S. Patent No. 7,012,523 to Stuart	RESP_ITC_1242_00004004- RESP_ITC_1242_00004014
U.S. Patent No. 7,015,943 to Chiang	RESP_ITC_1242_00004040- RESP_ITC_1242_00004054
U.S. Patent No. 7,019,770 to Katz	RESP_ITC_1242_00004072- RESP_ITC_1242_00004100
U.S. Patent No. 7,113,090 to Saylor	RESP_ITC_1242_00007587- RESP_ITC_1242_00007626
U.S. Patent No. 7,119,609 to Naidoo	RESP_ITC_1242_00007627- RESP_ITC_1242_00007646
U.S. Patent No. 7,123,142 to Bohbot	RESP_ITC_1242_00008184- RESP_ITC_1242_00008201
U.S. Patent No. 7,187,279 to Chung	RESP_ITC_1242_00008202- RESP_ITC_1242_00008225
U.S. Patent No. 7,193,644 to Carter	RESP_ITC_1242_00004259- RESP_ITC_1242_00004272
U.S. Patent No. 7,242,295 to Milinusic	RESP_ITC_1242_00004273- RESP_ITC_1242_00004316

Prior Art Reference	Bates Range
U.S. Patent No. 7,262,690 to Heaton	RESP_ITC_1242_00008226- RESP_ITC_1242_00008244
U.S. Patent No. 7,277,010 to Joao	RESP_ITC_1242_00004322- RESP_ITC_1242_00004411
U.S. Patent No. 7,310,111 to Ramirez-Diaz	RESP_ITC_1242_00008017- RESP_ITC_1242_00008034
U.S. Patent No. 7,403,116 to Bittner	RESP_ITC_1242_00008245- RESP_ITC_1242_00008256
U.S. Patent No. 7,529,485 to Farmer	RESP_ITC_1242_00008257- RESP_ITC_1242_00008311
U.S. Patent No. 7,609,941 to Matsukawa	RESP_ITC_1242_00008312- RESP_ITC_1242_00008364
U.S. Patent No. 7,786,891 to Owens	RESP_ITC_1242_00008365- RESP_ITC_1242_00008383
U.S. Patent No. 7,952,609 to Simerly	RESP_ITC_1242_00008384- RESP_ITC_1242_00008409
U.S. Patent No. 7,956,739 to Hong	RESP_ITC_1242_00008410- RESP_ITC_1242_00008428
U.S. Patent No. 8,154,581 to Carter	RESP_ITC_1242_00007386- RESP_ITC_1242_00007409
U.S. Patent No. 8,164,614 to Carter	RESP_ITC_1242_00007410- RESP_ITC_1242_00007434
U.S. Patent No. 8,520,068 to Naidoo	RESP_ITC_1242_00004713- RESP_ITC_1242_00004735
U.S. Patent No. 8,619,136 to Howarter	RESP_ITC_1242_00008429- RESP_ITC_1242_00008445
U.S. Patent No. 8,948,245 to Henson	RESP_ITC_1242_00008446- RESP_ITC_1242_00008519
U.S. Patent No. 9,250,267 to Jackson	RESP_ITC_1242_00006146- RESP_ITC_1242_00006161
U.S. Patent No. 9,300,921 to Naidoo	RESP_ITC_1242_00007647- RESP_ITC_1242_00007670
U.S. Patent No. 9,579,913 to Menard	RESP_ITC_1242_00007944- RESP_ITC_1242_00008016
Published U.S. App. 2002/0016971 to Berezowski	RESP_ITC_1242_00005283- RESP_ITC_1242_00005325
Published U.S. App. 2002/0030583 to Jang	RESP_ITC_1242_00001473- RESP_ITC_1242_00001479
Published U.S. App. 2002/0067259 to Fufidio	RESP_ITC_1242_00005326- RESP_ITC_1242_00005343
Published U.S. App. 2002/0071031 to Lord	RESP_ITC_1242_00006721- RESP_ITC_1242_00006728
Published U.S. App. 2002/0075307 to Alexander	RESP_ITC_1242_00001493- RESP_ITC_1242_00001520

Prior Art Reference	Bates Range
Published U.S. App. 2002/0076049 to Boykin	RESP_ITC_1242_00006729- RESP_ITC_1242_00006741
Published U.S. App. 2002/0118283 to Guerrero	RESP_ITC_1242_00001541- RESP_ITC_1242_00001567
Published U.S. App. 2002/0147982 to Naidoo	RESP_ITC_1242_00001568- RESP_ITC_1242_00001591
Published U.S. App. 2003/0046557 to Miller	RESP_ITC_1242_00005344- RESP_ITC_1242_00005387
Published U.S. App. 2003/0061344 to Monroe	RESP_ITC_1242_00005451- RESP_ITC_1242_00005597
Published U.S. App. 2003/0062997 to Naidoo	RESP_ITC_1242_00006742- RESP_ITC_1242_00006764
Published U.S. App. 2003/0071724 to D'Amico	RESP_ITC_1242_00007443- RESP_ITC_1242_00007458
Published U.S. App. 2003/0075287 to Weik	RESP_ITC_1242_00005388- RESP_ITC_1242_00005405
Published U.S. App. 2003/0081747 to Ahlstrom	RESP_ITC_1242_00005406- RESP_ITC_1242_00005419
Published U.S. App. 2003/0095184 to Lin	RESP_ITC_1242_00001744- RESP_ITC_1242_00001749
Published U.S. App. 2003/0095185 to Naifeh	RESP_ITC_1242_00001750- RESP_ITC_1242_00001771
Published U.S. App. 2003/0103138 to Assayag	RESP_ITC_1242_00005420- RESP_ITC_1242_00005429
Published U.S. App. 2003/0122514 to Mercier	RESP_ITC_1242_00001772- RESP_ITC_1242_00001780
U.S. Patent Publication. No. 2003/0117280 to Prehn	RESP_ITC_1242_00008173- RESP_ITC_1242_00008183
Published U.S. App. 2003/0171930 to Junqua	RESP_ITC_1242_00005430- RESP_ITC_1242_00005442
Published U.S. App. 2003/0206101 to Dixon	RESP_ITC_1242_00005443- RESP_ITC_1242_00005450
Published U.S. App. 2004/0003051 to Krzyanowski	RESP_ITC_1242_00005598- RESP_ITC_1242_00005622
Published U.S. App. 2004/0036603 to Bingham	RESP_ITC_1242_00006765- RESP_ITC_1242_00006780
Published U.S. App. 2004/0080615 to Klein	RESP_ITC_1242_00001858- RESP_ITC_1242_00001867
Published U.S. App. 2004/0080627 to Kroll	RESP_ITC_1242_00001868- RESP_ITC_1242_00001885
Published U.S. App. 2005/0001717 to Bohbot	RESP_ITC_1242_00002049- RESP_ITC_1242_00002067
Published U.S. App. 2005/0165612 to Van Rysselberghe	RESP_ITC_1242_00002127- RESP_ITC_1242_00002142

Prior Art Reference	Bates Range
Published U.S. App. 2006/0095539 to Renkis	RESP_ITC_1242_00005630- RESP_ITC_1242_00005651
Published U.S. App. 2006/0171453 to Rohlfing	RESP_ITC_1242_00005652- RESP_ITC_1242_00005693
Published U.S. App. 2007/0162748 to Okayama	RESP_ITC_1242_00007792- RESP_ITC_1242_00007845
Published U.S. App. 2009/0224912 to Sobol	RESP_ITC_1242_00002862- RESP_ITC_1242_00002867
Published U.S. App. 2006/0255931 to Hartsfield	RESP_ITC_1242_00005694- RESP_ITC_1242_00005727
Published U.S. App. 2019/0058720 to Lindquist	RESP_ITC_1242_00007459- RESP_ITC_1242_00007473
U.S. Pat. Pub. No. 2005/0285934 to Carter	RESP_ITC_1242_00002160- RESP_ITC_1242_00002173
U.S. Pat. Pub. No. 2007/0103548 to Carter	RESP_ITC_1242_00005776- RESP_ITC_1242_00005800
U.S. Pat. Pub. No. 2008/0117299 to Carter	RESP_ITC_1242_00002809- RESP_ITC_1242_00002833
Canadian Patent No. 2228679 to Heggie	RESP_ITC_1242_00006698- RESP_ITC_1242_00006720
French Patent No. FR 2759804 to Bonsaglio	RESP_ITC_1242_00001331- RESP_ITC_1242_00001347
United Kingdom Patent Application No. GB2285365 to Yau	RESP_ITC_1242_00001348- RESP_ITC_1242_00001373
Japan Patent No. JPH 09-107409	RESP_ITC_1242_00007775- RESP_ITC_1242_00007783
Korea Patent No. KR 100373449 to Son	RESP_ITC_1242_00001391- RESP_ITC_1242_00001408
Korea Patent No. KR 19980039422 to Sunghwa Kim Won-joon	RESP_ITC_1242_00001417- RESP_ITC_1242_00001421
Korea Patent No. KR 20010074212 to Shin	RESP_ITC_1242_00001422- RESP_ITC_1242_00001425
International Patent No. WO 99/06976 to Meyvis	RESP_ITC_1242_00006972- RESP_ITC_1242_00006995
International Patent No. WO 01/27763 to Simerly	RESP_ITC_1242_00006996- RESP_ITC_1242_00007042
International Patent No. WO 01/50731 to Noyman	RESP_ITC_1242_00005004- RESP_ITC_1242_00005038
International Patent No. WO 01/93220 to Menard	RESP_ITC_1242_00005039- RESP_ITC_1242_00005131
International Patent No. WO 01/097524 to Scaman	RESP_ITC_1242_00006454- RESP_ITC_1242_00006486
International Patent No. WO 02/005220 to Bennett	RESP_ITC_1242_00005132- RESP_ITC_1242_00005152

Prior Art Reference	Bates Range
International Patent No. WO 02/065420 to Vojtech	RESP_ITC_1242_00006487- RESP_ITC_1242_00006509
International Patent No. WO 03/028375 to Hong	RESP_ITC_1242_00007043- RESP_ITC_1242_00007075
International Patent No. WO 2006/046234 to Segel	RESP_ITC_1242_00008520- RESP_ITC_1242_00008521
“Motion Activated Video Surveillance Using TI DSP,” Carnegie Mellon University, August 4-6, 1999, available at https://www.ti.com/sc/docs/general/dsp/fest99/avi/1paper.pdf .	RESP_ITC_1242_00005272- RESP_ITC_1242_00005277
“Video Surveillance Equipment Selection and Application Guide,” NIJ Guide 201-99, October 1999, available at https://www.ojp.gov/pdffiles1/nij/179545.pdf .	RESP_ITC_1242_00006162- RESP_ITC_1242_00006244
“Nanny-Cam May Leave a Home Exposed,” New York Times, April 14, 2002, available at https://www.nytimes.com/2002/04/14/business/nanny-cam-may-leave-a-home-exposed.html .	RESP_ITC_1242_00005278- RESP_ITC_1242_00005282
Duy Nguyen, “Mobile Home Security with GPRS”.	RESP_ITC_1242_00007784- RESP_ITC_1242_00007787
“Scalable Multimedia System for Interactive Surveillance and Video Communication Applications,” IEEE 10th European Signal Processing Conference, September 4-8, 2000, available at https://ieeexplore.ieee.org/document/7075784 .	RESP_ITC_1242_00007788- RESP_ITC_1242_00007791
X10 Wireless Technology, Inc.’s Xcam2, technical user manual, available at http://www.electronicoscaldas.com/datasheet/XCam2-WideEye_X10.pdf .	RESP_ITC_1242_00007694- RESP_ITC_1242_00007695
80211b_Video	RESP_ITC_1242_00007846- RESP_ITC_1242_00007871
Axis 2100 Network Camera Users Guide V.1.2	RESP_ITC_1242_00007872- RESP_ITC_1242_00007929
Axis Communication Press Release_Axis adds wireless capability to its video offerings	RESP_ITC_1242_00007930
[KX-HCM270] Panasonic Network Camera Operating Instructions	RESP_ITC_1242_00008035- RESP_ITC_1242_00008172

2. Prior Art Systems

Prior Art System	Knowledgeable Person(s)
Panasonic Network Cameras, including Model No. KX-HCM270	Panasonic
Axis Network Cameras, including Axis 2100	Axis

B. Anticipation and Obviousness

Respondents attach Exhibits C-1 to C-12, which provide exemplary disclosures showing how the prior art anticipates and/or renders obvious the asserted claims of the '906 patent. The charts identify primary references, and in some cases, secondary references and obviousness contentions. Respondents also identify secondary references and obviousness contentions in Exhibit C-13. Respondents may rely on any of the primary references identified in Exhibits C-1 to C-12 in combination with any secondary reference identified in those exhibits or in Exhibit C-13. Respondents' anticipation contentions are presented in the following exhibits, each of which describes anticipation of one or more claims of the '906 patent by a primary reference:

Exhibit	Primary Reference
C-1	U.S. Patent No. 6,185,294 ("Chornenky")
C-2	U.S. Patent No. 5,428,388 ("von Bauer")
C-3	U.S. Patent Pub. 2004/0080615 ("Klein")
C-4	U.S. Patent No. 7,956,739 ("Hong")
C-5	U.S. Patent No. 7,015,943 ("Chiang")
C-6	U.S. Patent No. 8,619,136 ("Howarter")
C-7	WO 01/93220 ("Menard")
C-8	U.S. Patent No. 7,583,191 ("Zinser")
C-9	Panasonic Network Camera Model No. KX-HCM270 ("Panasonic")
C-10	Axis 2100 Network Camera ("Axis 2100")
C-11	WO 02/05220 ("Bennett")
C-12	U.S. Patent No. 4,524,384 ("Lefkowitz")

Respondents' obviousness contentions are also contained in Exhibits C-1 to C-12 and Exhibit C-13.

The U.S. Supreme Court in *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) emphasized that inventions arising from ordinary innovation, ordinary skill, or common sense should not be patentable. *Id.* at 1732, 1738, 1742–1743, 1746. A patent claim may be obvious if the combination of elements was obvious to try or if there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent's claims. When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, Section 103 likely bars its patentability. *Id.* at 1740. The Court stated that courts should “look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740–41. *KSR* does not mandate evidence of a motivation or suggestion to combine prior art references. See *TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 580–81 (E.D. Tex. 2007). “[A] court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ” to resolve the question of obviousness. *KSR*, 127 S. Ct. at 1741.

Based on all of these considerations, as further detailed in Exhibits C-1 to C-12 and Exhibit C-13, persons of ordinary skill in the art would have combined the teachings of the prior art references discussed and charted in those exhibits. The combinations of these references would have rendered obvious to one of ordinary skill in the art the subject matter of the asserted claims of the '906 patent. The references identified in Exhibits C-1 to C-12 and Exhibit C-13 are analogous prior art to the subject matter of the asserted claims and, for at least the reasons set forth below, are properly combinable. Because these prior art references exist within a single field of

art, particularly one in which individuals in the field often shared and/or collaborated on their work, it would have been obvious for a person of skill in the art to look from one piece of prior art to another in order to find any missing functionality they desired to implement. Therefore, these references provide interrelated teachings and one of ordinary skill would look to the concepts in any of these references when seeking to solve the problems purportedly addressed by the '906 patent.

Numerous prior art references, including those identified in the attached exhibits, reflect common knowledge and the state of the prior art before the earliest claimed effective filing date of the '906 patent. As it would be unduly burdensome to create detailed claim charts for all of the invalidating combinations, for at least the reasons described in these invalidity contentions, it would have been obvious to one of ordinary skill in the art to combine any of a number of prior art references, including any combination of those identified in the attached exhibits, to meet the limitations of the asserted claims of the '906 patent. Respondents' inclusion of exemplary combinations, in view of the factors and motivations identified here, does not preclude Respondents from identifying other invalidating combinations and/or motivations as appropriate.

No showing of a specific motivation to combine prior art is required to combine the references disclosed above and in the attached charts, because each combination of art would have no unexpected results, and at most would simply represent a known alternative to one of ordinary skill in the art. *See KSR*, 127 S. Ct. at 1739–40 (rejecting the Federal Circuit's "rigid" application of the teaching, suggestion, or motivation to combine test, instead espousing an "expansive and flexible" approach). Indeed, the Supreme Court held that a person of ordinary skill in the art is "a person of ordinary creativity, not an automaton" and "in many cases a person of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at

1742. Nevertheless, in addition to the information contained herein, Respondents hereby identify additional motivations and reasons to combine the cited art.

One or more combinations of the prior art references identified herein would have been obvious because these references would have been combined using: known methods to yield predictable results; known techniques in the same way; a simple substitution of one known, equivalent element for another to obtain predictable results; and/or a teaching, suggestion, or motivation in the prior art generally. In addition, it would have been obvious to combine the prior art references identified above because there were only a finite number of predictable solutions and/or because known work in one field of endeavor prompts variations based on predictable design incentives and/or market forces either in the same field or a different one. In addition, the combinations of the prior art references identified above would have been obvious because the combinations represent the known potential options with a reasonable expectation of success.

Additional evidence that there would have been a motivation or reason to combine the prior art references identified above includes the interrelated teachings of multiple prior art references; the effects of demands known to the design community or present in the marketplace; the existence of a known problem for which there was an obvious solution; the existence of a known need or problem in the field of endeavor at the time of the invention; and the background knowledge that would have been possessed by a person having ordinary skill in the art. For example, the prior art references are generally directed to the same problems. Thus, a skilled artisan seeking to solve these problems would look to these cited references in combination.

Thus, the motivation or reason to combine the teachings of the prior art references disclosed herein is found in the references themselves and in: (1) the nature of the problems being solved; (2) the express, implied, and inherent teachings of the prior art; (3) the knowledge of persons of

ordinary skill in the art; (4) the fact that the prior art is generally directed towards the same problems; and/or (5) the predictable results obtained in combining the different elements of the prior art; (6) the use of a known technique to improve similar devices, methods, or products in the same way; (7) the predictable results obtained in applying a known technique to a known device, method, or product ready for improvement; (8) the finite number of identified predictable solutions that had a reasonable expectation of success; and (9) known work in various technological fields that could be applied to the same or different technological fields based on design incentives or other market forces.

In addition, it would have obvious to combine any of the prior art in Exhibits C-1 to C-12 and Exhibit C-13 because all of these references relate to devices and methods of relating to networked video transmission and home automation in routine and predictable ways.

Respondents incorporate by reference prior art from the prosecution histories and background sections of the '906 patent. Respondents expect to rely on the testimony of one or more expert witnesses and documents referenced by those expert witnesses in support of these contentions and incorporate those forthcoming expert reports as if fully set forth herein.

Respondents contend that there are no secondary considerations of non-obviousness evidencing the validity of any of the asserted claims. Secondary considerations of non-obviousness, also referred to as objective indicia of non-obviousness, “can include copying, long felt but unsolved need, failure of others, commercial success, unexpected results created by the claimed invention, unexpected properties of the claimed invention, licenses showing industry respect for the invention, awards or other industry praise for the invention, and skepticism of skilled artisans before the invention.” *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1368 (Fed. Cir. 2013). “A nexus between the merits of the claimed invention

and evidence of secondary considerations is required in order for the evidence to be given substantial weight in an obviousness decision.” *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 668 (Fed. Cir. 2000). Moreover, even if a nexus exists, secondary considerations of non-obviousness “simply cannot overcome [a] strong prima facie showing of obviousness.” *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1368 (Fed. Cir. 2008). Complainants have not established the existence of any objective indicia of non-obviousness or secondary considerations. Respondents reserve the right to supplement their contentions to respond to any such evidence should Complainants be permitted to raise them in the future. While discovery in this case is ongoing, and Respondents’ investigation continues (which will include expert discovery), to the extent Complainants contend that one or more asserted claims is not obvious based on secondary considerations recognized by relevant authority Respondents contend such allegations are without merit. For example, Complainants have provided no evidence of copying of the purported inventions of the asserted claims.

Complainants also have not identified any evidence that the purported inventions of the asserted claims have enjoyed any commercial success. Similarly, Complainants have provided no evidence of any failure of others to realize any purported inventions of the asserted claims, or any evidence of any long felt but unsolved need solved by the purported inventions of the asserted claims. To the contrary, the relative novelty and widespread availability of video doorbell technology is contrary evidence of any long-felt need for the purported inventions of the asserted claims.

C. Other Invalidity Grounds

Respondents hereby identify grounds of invalidity based on (1) lack of written description under 35 U.S.C. § 112(a); (2) lack of enablement under 35 U.S.C. § 112(a); and (3) indefiniteness

under 35 U.S.C. § 112 (b). These contentions shall not be construed as an admission that any claim construction advanced by Respondents in this case is in any way inconsistent, flawed, or erroneous. Nor should these contentions prevent Respondents from advancing claim construction and/or non-infringement positions in lieu of, or in addition to, invalidity positions. Further, these contentions shall not be construed as an admission of or acquiescence to Complainants' purported construction of the claim language or of other positions advanced by Complainants during the course of this litigation. Respondents' Invalidity Contentions under 35 U.S.C. § 112 may depend, in part, on the Court's claim construction, as well as Complainants' alleged scope of the asserted claims of the '906 patent. Consequently, Respondents only identify the issues under 35 U.S.C. § 112 of which they are presently aware.

1. Enablement and/or Written Description Pursuant to 35 U.S.C. § 112(a)

The '906 patent does not provide sufficient written description to establish that the alleged inventors were in possession of the alleged inventions recited in certain of the asserted claims of the '906 patent at the time the '906 patent was filed. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). In other words, the applicants did not describe their purported inventions in a manner that “reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* The specification of the '906 patent also does not enable one of ordinary skill in the art to make and/or use certain recited elements of the asserted claims of the '906 patent without undue experimentation.

To the extent the following limitations are definite (under 35 U.S.C. § 112, second paragraph), the '906 patent fails to sufficiently describe or enable them as required by 35 U.S.C. § 112, first paragraph: “real time”; “associated with an entrance”; “sensitivity of the motion detector”; “threshold of the motion detector”; “wherein the exterior device is capable of modifying

the sensitivity of the motion detector upon receiving the request to do so”; “allow a user to modify a threshold of the motion detector”; “wherein the exterior device is capable of receiving the digital audio from a peripheral device”; “captured by a software application”; “predetermined condition”; “replicating at least a portion of the database”; “transmitting digital streaming video from a device upon detection of a person”; “storing the digital streaming video and digital audio in a database”; and “replicating at least a portion of the database on one or more computers.” Respondents also incorporate by reference Section XIII below.

2. Indefiniteness Pursuant to 35 U.S.C. § 112(b)

Several of the asserted claims of the ’906 patent are invalid because they fail to inform those skilled in the art about the scope of the alleged invention with reasonable certainty and are indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter the applicants regard as their alleged invention.

Certain asserted claims of the ’906 patent are invalid as indefinite due to the following limitations which fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention: “operating in a low light condition.”

VIII. U.S. PATENT NO. 10,097,797

A. Relevant Prior Art

Respondents contend that the prior art references identified in Respondents’ contentions anticipate or render obvious the asserted claims. Based on the information reasonably available to Respondents, the priority date of the asserted claims of the ’797 patent is no earlier than December 29, 2006, the filing date of the ’581 patent to which the ’797 patent claims priority. The ’581 patent is a continuation-in-part of the ’644 patent and introduced new matter. Despite having the burden of proof, Complainants have offered no evidence that any asserted claim of the ’797 patent

is entitled to a priority date earlier than December 29, 2006. Below, Respondents list some of the prior art cited in these contentions:

1. Patents and Printed Publications

Prior Art Reference	Bates Range
U.S. Patent No. 3,480,727 to Moore	RESP_ITC_1242_00007696- RESP_ITC_1242_00007704
U.S. Patent No. 4,075,659 to Desanti	RESP_ITC_1242_00007705- RESP_ITC_1242_00007711
U.S. Patent No. 4,370,675 to Cohn	RESP_ITC_1242_00007712- RESP_ITC_1242_00007719
U.S. Patent No. 4,524,384 to Lefkowitz	RESP_ITC_1242_00007720- RESP_ITC_1242_00007732
U.S. Patent No. 4,764,953 to Chern	RESP_ITC_1242_00007733- RESP_ITC_1242_00007741
U.S. Patent No. 4,843,461 to Tatsumi	RESP_ITC_1242_00007742- RESP_ITC_1242_00007757
U.S. Patent No. 4,959,713 to Morotomi	RESP_ITC_1242_00007758- RESP_ITC_1242_00007774
U.S. Patent No. 5,151,945 to Lee	RESP_ITC_1242_00006781- RESP_ITC_1242_00006794
U.S. Patent No. 5,428,388 to von Bauer	RESP_ITC_1242_00007474- RESP_ITC_1242_00007498
U.S. Patent No. 5,717,379 to Peters	RESP_ITC_1242_00003087- RESP_ITC_1242_00003093
U.S. Patent No. 5,822,542 to Smith	RESP_ITC_1242_00005889- RESP_ITC_1242_00006097
U.S. Patent No. 5,861,804 to Fansa	RESP_ITC_1242_00006795- RESP_ITC_1242_00006803
U.S. Patent No. 5,878,283 to House	RESP_ITC_1242_00006804- RESP_ITC_1242_00006825
U.S. Patent No. 6,060,994 to Chen	RESP_ITC_1242_00007499- RESP_ITC_1242_00007513
U.S. Patent No. 6,064,303 to Klein	RESP_ITC_1242_00006826- RESP_ITC_1242_00006840
U.S. Patent No. 6,069,655 to Seeley	RESP_ITC_1242_00003234- RESP_ITC_1242_00003257
U.S. Patent No. 6,097,429 to Seeley	RESP_ITC_1242_00006841- RESP_ITC_1242_00006855
U.S. Patent No. 6,104,785 to Chen	RESP_ITC_1242_00007514- RESP_ITC_1242_00007521
U.S. Patent No. 6,134,303 to Chen	RESP_ITC_1242_00007522- RESP_ITC_1242_00007529

Prior Art Reference	Bates Range
U.S. Patent No. 6,185,294 to Chornenky	RESP_ITC_1242_00007530- RESP_ITC_1242_00007540
U.S. Patent No. 6,323,897 to Kogane	RESP_ITC_1242_00006098- RESP_ITC_1242_00006109
U.S. Patent No. 6,359,560 to Budge	RESP_ITC_1242_00006110- RESP_ITC_1242_00006127
U.S. Patent No. 6,385,772 to Courtney	RESP_ITC_1242_00003405- RESP_ITC_1242_00003413
U.S. Patent No. 6,400,265 to Saylor	RESP_ITC_1242_00006856- RESP_ITC_1242_00006883
U.S. Patent No. 6,421,080 to Lambert	RESP_ITC_1242_00006884- RESP_ITC_1242_00006893
U.S. Patent No. 6,424,371 to Wen	RESP_ITC_1242_00006894- RESP_ITC_1242_00006905
U.S. Patent No. 6,476,858 to Diaz	RESP_ITC_1242_00006128- RESP_ITC_1242_00006145
U.S. Patent No. 6,542,078 to Script	RESP_ITC_1242_00007541- RESP_ITC_1242_00007557
U.S. Patent No. 6,816,085 to Haynes	RESP_ITC_1242_00006906- RESP_ITC_1242_00006923
U.S. Patent No. 6,828,909 to Script	RESP_ITC_1242_00007558- RESP_ITC_1242_00007586
U.S. Patent No. 6,943,682 to Dowens	RESP_ITC_1242_00003831- RESP_ITC_1242_00003841
U.S. Patent No. 6,956,478 to Oyagi	RESP_ITC_1242_00006924- RESP_ITC_1242_00006971
U.S. Patent No. 7,012,523 to Stuart	RESP_ITC_1242_00004004- RESP_ITC_1242_00004014
U.S. Patent No. 7,015,943 to Chiang	RESP_ITC_1242_00004040- RESP_ITC_1242_00004054
U.S. Patent No. 7,019,770 to Katz	RESP_ITC_1242_00004072- RESP_ITC_1242_00004100
U.S. Patent No. 7,113,090 to Saylor	RESP_ITC_1242_00007587- RESP_ITC_1242_00007626
U.S. Patent No. 7,119,609 to Naidoo	RESP_ITC_1242_00007627- RESP_ITC_1242_00007646
U.S. Patent No. 7,123,142 to Bohbot	RESP_ITC_1242_00008184- RESP_ITC_1242_00008201
U.S. Patent No. 7,187,279 to Chung	RESP_ITC_1242_00008202- RESP_ITC_1242_00008225
U.S. Patent No. 7,193,644 to Carter	RESP_ITC_1242_00004259- RESP_ITC_1242_00004272
U.S. Patent No. 7,242,295 to Milinusic	RESP_ITC_1242_00004273- RESP_ITC_1242_00004316

Prior Art Reference	Bates Range
U.S. Patent No. 7,262,690 to Heaton	RESP_ITC_1242_00008226- RESP_ITC_1242_00008244
U.S. Patent No. 7,277,010 to Joao	RESP_ITC_1242_00004322- RESP_ITC_1242_00004411
U.S. Patent No. 7,310,111 to Ramirez-Diaz	RESP_ITC_1242_00008017- RESP_ITC_1242_00008034
U.S. Patent No. 7,403,116 to Bittner	RESP_ITC_1242_00008245- RESP_ITC_1242_00008256
U.S. Patent No. 7,529,485 to Farmer	RESP_ITC_1242_00008257- RESP_ITC_1242_00008311
U.S. Patent No. 7,609,941 to Matsukawa	RESP_ITC_1242_00008312- RESP_ITC_1242_00008364
U.S. Patent No. 7,786,891 to Owens	RESP_ITC_1242_00008365- RESP_ITC_1242_00008383
U.S. Patent No. 7,952,609 to Simerly	RESP_ITC_1242_00008384- RESP_ITC_1242_00008409
U.S. Patent No. 7,956,739 to Hong	RESP_ITC_1242_00008410- RESP_ITC_1242_00008428
U.S. Patent No. 8,154,581 to Carter	RESP_ITC_1242_00007386- RESP_ITC_1242_00007409
U.S. Patent No. 8,164,614 to Carter	RESP_ITC_1242_00007410- RESP_ITC_1242_00007434
U.S. Patent No. 8,520,068 to Naidoo	RESP_ITC_1242_00004713- RESP_ITC_1242_00004735
U.S. Patent No. 8,619,136 to Howarter	RESP_ITC_1242_00008429- RESP_ITC_1242_00008445
U.S. Patent No. 8,948,245 to Henson	RESP_ITC_1242_00008446- RESP_ITC_1242_00008519
U.S. Patent No. 9,250,267 to Jackson	RESP_ITC_1242_00006146- RESP_ITC_1242_00006161
U.S. Patent No. 9,300,921 to Naidoo	RESP_ITC_1242_00007647- RESP_ITC_1242_00007670
U.S. Patent No. 9,579,913 to Menard	RESP_ITC_1242_00007944- RESP_ITC_1242_00008016
Published U.S. App. 2002/0016971 to Berezowski	RESP_ITC_1242_00005283- RESP_ITC_1242_00005325
Published U.S. App. 2002/0030583 to Jang	RESP_ITC_1242_00001473- RESP_ITC_1242_00001479
Published U.S. App. 2002/0067259 to Fufidio	RESP_ITC_1242_00005326- RESP_ITC_1242_00005343
Published U.S. App. 2002/0071031 to Lord	RESP_ITC_1242_00006721- RESP_ITC_1242_00006728
Published U.S. App. 2002/0075307 to Alexander	RESP_ITC_1242_00001493- RESP_ITC_1242_00001520

Prior Art Reference	Bates Range
Published U.S. App. 2002/0076049 to Boykin	RESP_ITC_1242_00006729- RESP_ITC_1242_00006741
Published U.S. App. 2002/0118283 to Guerrero	RESP_ITC_1242_00001541- RESP_ITC_1242_00001567
Published U.S. App. 2002/0147982 to Naidoo	RESP_ITC_1242_00001568- RESP_ITC_1242_00001591
Published U.S. App. 2003/0046557 to Miller	RESP_ITC_1242_00005344- RESP_ITC_1242_00005387
Published U.S. App. 2003/0061344 to Monroe	RESP_ITC_1242_00005451- RESP_ITC_1242_00005597
Published U.S. App. 2003/0062997 to Naidoo	RESP_ITC_1242_00006742- RESP_ITC_1242_00006764
Published U.S. App. 2003/0071724 to D'Amico	RESP_ITC_1242_00007443- RESP_ITC_1242_00007458
Published U.S. App. 2003/0075287 to Weik	RESP_ITC_1242_00005388- RESP_ITC_1242_00005405
Published U.S. App. 2003/0081747 to Ahlstrom	RESP_ITC_1242_00005406- RESP_ITC_1242_00005419
Published U.S. App. 2003/0095184 to Lin	RESP_ITC_1242_00001744- RESP_ITC_1242_00001749
Published U.S. App. 2003/0095185 to Naifeh	RESP_ITC_1242_00001750- RESP_ITC_1242_00001771
Published U.S. App. 2003/0103138 to Assayag	RESP_ITC_1242_00005420- RESP_ITC_1242_00005429
Published U.S. App. 2003/0122514 to Mercier	RESP_ITC_1242_00001772- RESP_ITC_1242_00001780
U.S. Patent Publication. No. 2003/0117280 to Prehn	RESP_ITC_1242_00008173- RESP_ITC_1242_00008183
Published U.S. App. 2003/0171930 to Junqua	RESP_ITC_1242_00005430- RESP_ITC_1242_00005442
Published U.S. App. 2003/0206101 to Dixon	RESP_ITC_1242_00005443- RESP_ITC_1242_00005450
Published U.S. App. 2004/0003051 to Krzyanowski	RESP_ITC_1242_00005598- RESP_ITC_1242_00005622
Published U.S. App. 2004/0036603 to Bingham	RESP_ITC_1242_00006765- RESP_ITC_1242_00006780
Published U.S. App. 2004/0080615 to Klein	RESP_ITC_1242_00001858- RESP_ITC_1242_00001867
Published U.S. App. 2004/0080627 to Kroll	RESP_ITC_1242_00001868- RESP_ITC_1242_00001885
Published U.S. App. 2005/0001717 to Bohbot	RESP_ITC_1242_00002049- RESP_ITC_1242_00002067
Published U.S. App. 2005/0165612 to Van Rysselberghe	RESP_ITC_1242_00002127- RESP_ITC_1242_00002142

Prior Art Reference	Bates Range
Published U.S. App. 2006/0095539 to Renkis	RESP_ITC_1242_00005630- RESP_ITC_1242_00005651
Published U.S. App. 2006/0171453 to Rohlfing	RESP_ITC_1242_00005652- RESP_ITC_1242_00005693
Published U.S. App. 2007/0162748 to Okayama	RESP_ITC_1242_00007792- RESP_ITC_1242_00007845
Published U.S. App. 2009/0224912 to Sobol	RESP_ITC_1242_00002862- RESP_ITC_1242_00002867
Published U.S. App. 2006/0255931 to Hartsfield	RESP_ITC_1242_00005694- RESP_ITC_1242_00005727
Published U.S. App. 2019/0058720 to Lindquist	RESP_ITC_1242_00007459- RESP_ITC_1242_00007473
U.S. Pat. Pub. No. 2005/0285934 to Carter	RESP_ITC_1242_00002160- RESP_ITC_1242_00002173
U.S. Pat. Pub. No. 2007/0103548 to Carter	RESP_ITC_1242_00005776- RESP_ITC_1242_00005800
U.S. Pat. Pub. No. 2008/0117299 to Carter	RESP_ITC_1242_00002809- RESP_ITC_1242_00002833
Canadian Patent No. 2228679 to Heggie	RESP_ITC_1242_00006698- RESP_ITC_1242_00006720
French Patent No. FR 2759804 to Bonsaglio	RESP_ITC_1242_00001331- RESP_ITC_1242_00001347
United Kingdom Patent Application No. GB2285365 to Yau	RESP_ITC_1242_00001348- RESP_ITC_1242_00001373
Japan Patent No. JPH 09-107409	RESP_ITC_1242_00007775- RESP_ITC_1242_00007783
Korea Patent No. KR 100373449 to Son	RESP_ITC_1242_00001391- RESP_ITC_1242_00001408
Korea Patent No. KR 19980039422 to Sunghwa Kim Won-joon	RESP_ITC_1242_00001417- RESP_ITC_1242_00001421
Korea Patent No. KR 20010074212 to Shin	RESP_ITC_1242_00001422- RESP_ITC_1242_00001425
International Patent No. WO 99/06976 to Meyvis	RESP_ITC_1242_00006972- RESP_ITC_1242_00006995
International Patent No. WO 01/27763 to Simerly	RESP_ITC_1242_00006996- RESP_ITC_1242_00007042
International Patent No. WO 01/50731 to Noyman	RESP_ITC_1242_00005004- RESP_ITC_1242_00005038
International Patent No. WO 01/93220 to Menard	RESP_ITC_1242_00005039- RESP_ITC_1242_00005131
International Patent No. WO 01/097524 to Scaman	RESP_ITC_1242_00006454- RESP_ITC_1242_00006486
International Patent No. WO 02/005220 to Bennett	RESP_ITC_1242_00005132- RESP_ITC_1242_00005152

Prior Art Reference	Bates Range
International Patent No. WO 02/065420 to Vojtech	RESP_ITC_1242_00006487- RESP_ITC_1242_00006509
International Patent No. WO 03/028375 to Hong	RESP_ITC_1242_00007043- RESP_ITC_1242_00007075
International Patent No. WO 2006/046234 to Segel	RESP_ITC_1242_00008520- RESP_ITC_1242_00008521
“Motion Activated Video Surveillance Using TI DSP,” Carnegie Mellon University, August 4-6, 1999, available at https://www.ti.com/sc/docs/general/dsp/fest99/avi/1paper.pdf .	RESP_ITC_1242_00005272- RESP_ITC_1242_00005277
“Video Surveillance Equipment Selection and Application Guide,” NIJ Guide 201-99, October 1999, available at https://www.ojp.gov/pdffiles1/nij/179545.pdf .	RESP_ITC_1242_00006162- RESP_ITC_1242_00006244
“Nanny-Cam May Leave a Home Exposed,” New York Times, April 14, 2002, available at https://www.nytimes.com/2002/04/14/business/nanny-cam-may-leave-a-home-exposed.html .	RESP_ITC_1242_00005278- RESP_ITC_1242_00005282
Duy Nguyen, “Mobile Home Security with GPRS”.	RESP_ITC_1242_00007784- RESP_ITC_1242_00007787
“Scalable Multimedia System for Interactive Surveillance and Video Communication Applications,” IEEE 10th European Signal Processing Conference, September 4-8, 2000, available at https://ieeexplore.ieee.org/document/7075784 .	RESP_ITC_1242_00007788- RESP_ITC_1242_00007791
X10 Wireless Technology, Inc.’s Xcam2, technical user manual, available at http://www.electronicoscaldas.com/datasheet/XCam2-WideEye_X10.pdf .	RESP_ITC_1242_00007694- RESP_ITC_1242_00007695
80211b_Video	RESP_ITC_1242_00007846- RESP_ITC_1242_00007871
Axis 2100 Network Camera Users Guide V.1.2	RESP_ITC_1242_00007872- RESP_ITC_1242_00007929
Axis Communication Press Release_Axis adds wireless capability to its video offerings	RESP_ITC_1242_00007930
[KX-HCM270] Panasonic Network Camera Operating Instructions	RESP_ITC_1242_00008035- RESP_ITC_1242_00008172

2. Prior Art Systems

Prior Art System	Knowledgeable Person(s)
Panasonic Network Cameras, including Model No. KX-HCM270	Panasonic
Axis Network Cameras, including Axis 2100	Axis

B. Anticipation and Obviousness

Respondents attach Exhibits D-1 to D-12, which provide exemplary disclosures showing how the prior art anticipates and/or renders obvious the asserted claims of the '797 patent. The charts identify primary references, and in some cases, secondary references and obviousness contentions. Respondents also identify secondary references and obviousness contentions in Exhibit D-13. Respondents may rely on any of the primary references identified in Exhibits D-1 to D-12 in combination with any secondary reference identified in those exhibits or in Exhibit D-13. Respondents' anticipation contentions are presented in the following exhibits, each of which describes anticipation of one or more claims of the '797 patent by a primary reference:

Exhibit	Primary Reference
D-1	U.S. Patent No. 6,185,294 ("Chornenky")
D-2	U.S. Patent No. 5,428,388 ("von Bauer")
D-3	U.S. Patent Pub. 2004/0080615 ("Klein")
D-4	U.S. Patent No. 7,956,739 ("Hong")
D-5	U.S. Patent No. 7,015,943 ("Chiang")
D-6	U.S. Patent No. 8,619,136 ("Howarter")
D-7	WO 01/93220 ("Menard")
D-8	U.S. Patent No. 7,583,191 ("Zinser")
D-9	Panasonic Network Camera Model No. KX-HCM270 ("Panasonic")
D-10	Axis 2100 Network Camera ("Axis 2100")
D-11	WO 02/05220 ("Bennett")
D-12	U.S. Patent No. 4,524,384 ("Lefkowitz")

Respondents' obviousness contentions are also contained in Exhibits D-1 to D-12 and Exhibit D-13

The U.S. Supreme Court in *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) emphasized that inventions arising from ordinary innovation, ordinary skill, or common sense should not be patentable. *Id.* at 1732, 1738, 1742–1743, 1746. A patent claim may be obvious if the combination of elements was obvious to try or if there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent's claims. When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, Section 103 likely bars its patentability. *Id.* at 1740. The Court stated that courts should “look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740–41. *KSR* does not mandate evidence of a motivation or suggestion to combine prior art references. See *TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 580-81 (E.D. Tex. 2007). “[A] court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ” to resolve the question of obviousness. *KSR*, 127 S. Ct. at 1741.

Based on all of these considerations, as further detailed in Exhibits D-1 to D-12 and Exhibit D-13, persons of ordinary skill in the art would have combined the teachings of the prior art references discussed and charted in those exhibits. The combinations of these references would have rendered obvious to one of ordinary skill in the art the subject matter of the asserted claims of the '797 patent. The references identified in Exhibits D-1 to D-12 and Exhibit D-13 are analogous prior art to the subject matter of the asserted claims and, for at least the reasons set forth below, are properly combinable. Because these prior art references exist within a single field of

art, particularly one in which individuals in the field often shared and/or collaborated on their work, it would have been obvious for a person of skill in the art to look from one piece of prior art to another in order to find any missing functionality they desired to implement. Therefore, these references provide interrelated teachings and one of ordinary skill would look to the concepts in any of these references when seeking to solve the problems purportedly addressed by the '797 patent.

Numerous prior art references, including those identified in the attached exhibits, reflect common knowledge and the state of the prior art before the earliest claimed effective filing date of the '797 patent. As it would be unduly burdensome to create detailed claim charts for all of the invalidating combinations, for at least the reasons described in these invalidity contentions, it would have been obvious to one of ordinary skill in the art to combine any of a number of prior art references, including any combination of those identified in the attached exhibits, to meet the limitations of the asserted claims of the '797 patent. Respondents' inclusion of exemplary combinations, in view of the factors and motivations identified here, does not preclude Respondents from identifying other invalidating combinations and/or motivations as appropriate.

No showing of a specific motivation to combine prior art is required to combine the references disclosed above and in the attached charts, because each combination of art would have no unexpected results, and at most would simply represent a known alternative to one of ordinary skill in the art. *See KSR*, 127 S. Ct. at 1739–40 (rejecting the Federal Circuit's "rigid" application of the teaching, suggestion, or motivation to combine test, instead espousing an "expansive and flexible" approach). Indeed, the Supreme Court held that a person of ordinary skill in the art is "a person of ordinary creativity, not an automaton" and "in many cases a person of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at

1742. Nevertheless, in addition to the information contained herein, Respondents hereby identify additional motivations and reasons to combine the cited art.

One or more combinations of the prior art references identified herein would have been obvious because these references would have been combined using: known methods to yield predictable results; known techniques in the same way; a simple substitution of one known, equivalent element for another to obtain predictable results; and/or a teaching, suggestion, or motivation in the prior art generally. In addition, it would have been obvious to combine the prior art references identified above because there were only a finite number of predictable solutions and/or because known work in one field of endeavor prompts variations based on predictable design incentives and/or market forces either in the same field or a different one. In addition, the combinations of the prior art references identified above would have been obvious because the combinations represent the known potential options with a reasonable expectation of success.

Additional evidence that there would have been a motivation or reason to combine the prior art references identified above includes the interrelated teachings of multiple prior art references; the effects of demands known to the design community or present in the marketplace; the existence of a known problem for which there was an obvious solution; the existence of a known need or problem in the field of endeavor at the time of the invention; and the background knowledge that would have been possessed by a person having ordinary skill in the art. For example, the prior art references are generally directed to the same problems. Thus, a skilled artisan seeking to solve these problems would look to these cited references in combination.

Thus, the motivation or reason to combine the teachings of the prior art references disclosed herein is found in the references themselves and in: (1) the nature of the problems being solved; (2) the express, implied, and inherent teachings of the prior art; (3) the knowledge of persons of

ordinary skill in the art; (4) the fact that the prior art is generally directed towards the same problems; and/or (5) the predictable results obtained in combining the different elements of the prior art; (6) the use of a known technique to improve similar devices, methods, or products in the same way; (7) the predictable results obtained in applying a known technique to a known device, method, or product ready for improvement; (8) the finite number of identified predictable solutions that had a reasonable expectation of success; and (9) known work in various technological fields that could be applied to the same or different technological fields based on design incentives or other market forces.

In addition, it would have obvious to combine any of the prior art in Exhibits D-1 to D-12 and Exhibit D-13 because all of these references relate to devices and methods relating to networked video transmission and home automation in routine and predictable ways.

Respondents incorporate by reference prior art from the prosecution histories and background sections of the '797 patent. Respondents expect to rely on the testimony of one or more expert witnesses and documents referenced by those expert witnesses in support of these contentions and incorporate those forthcoming expert reports as if fully set forth herein.

Respondents contend that there are no secondary considerations of non-obviousness evidencing the validity of any of the asserted claims. Secondary considerations of non-obviousness, also referred to as objective indicia of non-obviousness, “can include copying, long felt but unsolved need, failure of others, commercial success, unexpected results created by the claimed invention, unexpected properties of the claimed invention, licenses showing industry respect for the invention, awards or other industry praise for the invention, and skepticism of skilled artisans before the invention.” *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1368 (Fed. Cir. 2013). “A nexus between the merits of the claimed invention

and evidence of secondary considerations is required in order for the evidence to be given substantial weight in an obviousness decision.” *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 668 (Fed. Cir. 2000). Moreover, even if a nexus exists, secondary considerations of non-obviousness “simply cannot overcome [a] strong prima facie showing of obviousness.” *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1368 (Fed. Cir. 2008). Complainants have not established the existence of any objective indicia of non-obviousness or secondary considerations. Respondents reserve the right to supplement their contentions to respond to any such evidence should Complainants be permitted to raise them in the future. While discovery in this case is ongoing, and Respondents’ investigation continues (which will include expert discovery), to the extent Complainants contend that one or more asserted claims is not obvious based on secondary considerations recognized by relevant authority Respondents contend such allegations are without merit. For example, Complainants have provided no evidence of copying of the purported inventions of the asserted claims.

Complainants also have not identified any evidence that the purported inventions of the asserted claims have enjoyed any commercial success. Similarly, Complainants have provided no evidence of any failure of others to realize any purported inventions of the asserted claims, or any evidence of any long felt but unsolved need solved by the purported inventions of the asserted claims. To the contrary, the relative novelty and widespread availability of video doorbell technology is contrary evidence of any long-felt need for the purported inventions of the asserted claims.

C. Other Invalidity Grounds

Respondents hereby identify grounds of invalidity based on (1) lack of written description under 35 U.S.C. § 112(a); (2) lack of enablement under 35 U.S.C. § 112(a); and (3) indefiniteness

under 35 U.S.C. § 112 (b). These contentions shall not be construed as an admission that any claim construction advanced by Respondents in this case is in any way inconsistent, flawed, or erroneous. Nor should these contentions prevent Respondents from advancing claim construction and/or non-infringement positions in lieu of, or in addition to, invalidity positions. Further, these contentions shall not be construed as an admission of or acquiescence to Complainants' purported construction of the claim language or of other positions advanced by Complainants during the course of this litigation. Respondents' Invalidity Contentions under 35 U.S.C. § 112 may depend, in part, on the Court's claim construction, as well as Complainants' alleged scope of the asserted claims of the '797 patent. Consequently, Respondents only identify the issues under 35 U.S.C. § 112 of which they are presently aware.

1. Enablement and/or Written Description Pursuant to 35 U.S.C. § 112(a)

The '797 patent does not provide sufficient written description to establish that the alleged inventors were in possession of the alleged inventions recited in certain of the asserted claims of the '797 patent at the time the '797 patent was filed. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). In other words, the applicants did not describe their purported inventions in a manner that “reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* The specification of the '797 patent also does not enable one of ordinary skill in the art to make and/or use certain recited elements of the asserted claims of the '797 patent without undue experimentation.

To the extent the following limitations are definite (under 35 U.S.C. § 112, second paragraph), the '797 patent fails to sufficiently describe or enable them as required by 35 U.S.C. § 112, first paragraph: “viewing system associated with an entrance”; “partially via the Internet”; “person associated with the entrance”; and “wherein the exterior device is capable of wirelessly

transmitting digital streaming video, at least partially via the internet, to a peripheral device, which is a cell phone, upon detection of a person associated.” Respondents also incorporate by reference Section XIII below.

2. Indefiniteness Pursuant to 35 U.S.C. § 112(b)

Several of the asserted claims of the ’797 patent are invalid because they fail to inform those skilled in the art about the scope of the alleged invention with reasonable certainty and are indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter the applicants regard as their alleged invention.

Certain asserted claims of the ’797 patent are invalid as indefinite due to the following limitations which fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention: “wherein the exterior device is capable of operating in a low light condition.”

IX. U.S. PATENT NO. 9,485,478

A. Relevant Prior Art

Respondents contend that the prior art references identified in Respondents’ contentions anticipate or render obvious the asserted claims. Based on the information reasonably available to Respondents, the priority date of the asserted claims of the ’478 patent is no earlier than December 29, 2006, the filing date of the ’581 patent to which the ’478 patent claims priority. The ’581 patent is a continuation-in-part of the ’644 patent and introduced new matter. Despite having the burden of proof, Complainants have offered no evidence that any asserted claim of the ’478 patent is entitled to a priority date earlier than December 29, 2006. Below, Respondents list some of the prior art cited in these contentions:

1. Patents and Printed Publications

Prior Art Reference	Bates Range
U.S. Patent No. 3,480,727 to Moore	RESP_ITC_1242_00007696- RESP_ITC_1242_00007704

Prior Art Reference	Bates Range
U.S. Patent No. 4,075,659 to Desanti	RESP_ITC_1242_00007705- RESP_ITC_1242_00007711
U.S. Patent No. 4,370,675 to Cohn	RESP_ITC_1242_00007712- RESP_ITC_1242_00007719
U.S. Patent No. 4,524,384 to Lefkowitz	RESP_ITC_1242_00007720- RESP_ITC_1242_00007732
U.S. Patent No. 4,764,953 to Chern	RESP_ITC_1242_00007733- RESP_ITC_1242_00007741
U.S. Patent No. 4,843,461 to Tatsumi	RESP_ITC_1242_00007742- RESP_ITC_1242_00007757
U.S. Patent No. 4,959,713 to Morotomi	RESP_ITC_1242_00007758- RESP_ITC_1242_00007774
U.S. Patent No. 5,151,945 to Lee	RESP_ITC_1242_00006781- RESP_ITC_1242_00006794
U.S. Patent No. 5,428,388 to von Bauer	RESP_ITC_1242_00007474- RESP_ITC_1242_00007498
U.S. Patent No. 5,717,379 to Peters	RESP_ITC_1242_00003087- RESP_ITC_1242_00003093
U.S. Patent No. 5,822,542 to Smith	RESP_ITC_1242_00005889- RESP_ITC_1242_00006097
U.S. Patent No. 5,861,804 to Fansa	RESP_ITC_1242_00006795- RESP_ITC_1242_00006803
U.S. Patent No. 5,878,283 to House	RESP_ITC_1242_00006804- RESP_ITC_1242_00006825
U.S. Patent No. 6,060,994 to Chen	RESP_ITC_1242_00007499- RESP_ITC_1242_00007513
U.S. Patent No. 6,064,303 to Klein	RESP_ITC_1242_00006826- RESP_ITC_1242_00006840
U.S. Patent No. 6,069,655 to Seeley	RESP_ITC_1242_00003234- RESP_ITC_1242_00003257
U.S. Patent No. 6,097,429 to Seeley	RESP_ITC_1242_00006841- RESP_ITC_1242_00006855
U.S. Patent No. 6,104,785 to Chen	RESP_ITC_1242_00007514- RESP_ITC_1242_00007521
U.S. Patent No. 6,134,303 to Chen	RESP_ITC_1242_00007522- RESP_ITC_1242_00007529
U.S. Patent No. 6,185,294 to Chornenky	RESP_ITC_1242_00007530- RESP_ITC_1242_00007540
U.S. Patent No. 6,323,897 to Kogane	RESP_ITC_1242_00006098- RESP_ITC_1242_00006109
U.S. Patent No. 6,359,560 to Budge	RESP_ITC_1242_00006110- RESP_ITC_1242_00006127
U.S. Patent No. 6,385,772 to Courtney	RESP_ITC_1242_00003405- RESP_ITC_1242_00003413

Prior Art Reference	Bates Range
U.S. Patent No. 6,400,265 to Saylor	RESP_ITC_1242_00006856- RESP_ITC_1242_00006883
U.S. Patent No. 6,421,080 to Lambert	RESP_ITC_1242_00006884- RESP_ITC_1242_00006893
U.S. Patent No. 6,424,371 to Wen	RESP_ITC_1242_00006894- RESP_ITC_1242_00006905
U.S. Patent No. 6,476,858 to Diaz	RESP_ITC_1242_00006128- RESP_ITC_1242_00006145
U.S. Patent No. 6,542,078 to Script	RESP_ITC_1242_00007541- RESP_ITC_1242_00007557
U.S. Patent No. 6,816,085 to Haynes	RESP_ITC_1242_00006906- RESP_ITC_1242_00006923
U.S. Patent No. 6,828,909 to Script	RESP_ITC_1242_00007558- RESP_ITC_1242_00007586
U.S. Patent No. 6,943,682 to Dowens	RESP_ITC_1242_00003831- RESP_ITC_1242_00003841
U.S. Patent No. 6,956,478 to Oyagi	RESP_ITC_1242_00006924- RESP_ITC_1242_00006971
U.S. Patent No. 7,012,523 to Stuart	RESP_ITC_1242_00004004- RESP_ITC_1242_00004014
U.S. Patent No. 7,015,943 to Chiang	RESP_ITC_1242_00004040- RESP_ITC_1242_00004054
U.S. Patent No. 7,019,770 to Katz	RESP_ITC_1242_00004072- RESP_ITC_1242_00004100
U.S. Patent No. 7,113,090 to Saylor	RESP_ITC_1242_00007587- RESP_ITC_1242_00007626
U.S. Patent No. 7,119,609 to Naidoo	RESP_ITC_1242_00007627- RESP_ITC_1242_00007646
U.S. Patent No. 7,123,142 to Bohbot	RESP_ITC_1242_00008184- RESP_ITC_1242_00008201
U.S. Patent No. 7,187,279 to Chung	RESP_ITC_1242_00008202- RESP_ITC_1242_00008225
U.S. Patent No. 7,193,644 to Carter	RESP_ITC_1242_00004259- RESP_ITC_1242_00004272
U.S. Patent No. 7,242,295 to Milinusic	RESP_ITC_1242_00004273- RESP_ITC_1242_00004316
U.S. Patent No. 7,262,690 to Heaton	RESP_ITC_1242_00008226- RESP_ITC_1242_00008244
U.S. Patent No. 7,277,010 to Joao	RESP_ITC_1242_00004322- RESP_ITC_1242_00004411
U.S. Patent No. 7,310,111 to Ramirez-Diaz	RESP_ITC_1242_00008017- RESP_ITC_1242_00008034
U.S. Patent No. 7,403,116 to Bittner	RESP_ITC_1242_00008245- RESP_ITC_1242_00008256

Prior Art Reference	Bates Range
U.S. Patent No. 7,529,485 to Farmer	RESP_ITC_1242_00008257- RESP_ITC_1242_00008311
U.S. Patent No. 7,609,941 to Matsukawa	RESP_ITC_1242_00008312- RESP_ITC_1242_00008364
U.S. Patent No. 7,786,891 to Owens	RESP_ITC_1242_00008365- RESP_ITC_1242_00008383
U.S. Patent No. 7,952,609 to Simerly	RESP_ITC_1242_00008384- RESP_ITC_1242_00008409
U.S. Patent No. 7,956,739 to Hong	RESP_ITC_1242_00008410- RESP_ITC_1242_00008428
U.S. Patent No. 8,154,581 to Carter	RESP_ITC_1242_00007386- RESP_ITC_1242_00007409
U.S. Patent No. 8,164,614 to Carter	RESP_ITC_1242_00007410- RESP_ITC_1242_00007434
U.S. Patent No. 8,520,068 to Naidoo	RESP_ITC_1242_00004713- RESP_ITC_1242_00004735
U.S. Patent No. 8,619,136 to Howarter	RESP_ITC_1242_00008429- RESP_ITC_1242_00008445
U.S. Patent No. 8,948,245 to Henson	RESP_ITC_1242_00008446- RESP_ITC_1242_00008519
U.S. Patent No. 9,250,267 to Jackson	RESP_ITC_1242_00006146- RESP_ITC_1242_00006161
U.S. Patent No. 9,300,921 to Naidoo	RESP_ITC_1242_00007647- RESP_ITC_1242_00007670
U.S. Patent No. 9,579,913 to Menard	RESP_ITC_1242_00007944- RESP_ITC_1242_00008016
Published U.S. App. 2002/0016971 to Berezowski	RESP_ITC_1242_00005283- RESP_ITC_1242_00005325
Published U.S. App. 2002/0030583 to Jang	RESP_ITC_1242_00001473- RESP_ITC_1242_00001479
Published U.S. App. 2002/0067259 to Fufidio	RESP_ITC_1242_00005326- RESP_ITC_1242_00005343
Published U.S. App. 2002/0071031 to Lord	RESP_ITC_1242_00006721- RESP_ITC_1242_00006728
Published U.S. App. 2002/0075307 to Alexander	RESP_ITC_1242_00001493- RESP_ITC_1242_00001520
Published U.S. App. 2002/0076049 to Boykin	RESP_ITC_1242_00006729- RESP_ITC_1242_00006741
Published U.S. App. 2002/0118283 to Guerrero	RESP_ITC_1242_00001541- RESP_ITC_1242_00001567
Published U.S. App. 2002/0147982 to Naidoo	RESP_ITC_1242_00001568- RESP_ITC_1242_00001591
Published U.S. App. 2003/0046557 to Miller	RESP_ITC_1242_00005344- RESP_ITC_1242_00005387

Prior Art Reference	Bates Range
Published U.S. App. 2003/0061344 to Monroe	RESP_ITC_1242_00005451- RESP_ITC_1242_00005597
Published U.S. App. 2003/0062997 to Naidoo	RESP_ITC_1242_00006742- RESP_ITC_1242_00006764
Published U.S. App. 2003/0071724 to D'Amico	RESP_ITC_1242_00007443- RESP_ITC_1242_00007458
Published U.S. App. 2003/0075287 to Weik	RESP_ITC_1242_00005388- RESP_ITC_1242_00005405
Published U.S. App. 2003/0081747 to Ahlstrom	RESP_ITC_1242_00005406- RESP_ITC_1242_00005419
Published U.S. App. 2003/0095184 to Lin	RESP_ITC_1242_00001744- RESP_ITC_1242_00001749
Published U.S. App. 2003/0095185 to Naifeh	RESP_ITC_1242_00001750- RESP_ITC_1242_00001771
Published U.S. App. 2003/0103138 to Assayag	RESP_ITC_1242_00005420- RESP_ITC_1242_00005429
Published U.S. App. 2003/0122514 to Mercier	RESP_ITC_1242_00001772- RESP_ITC_1242_00001780
U.S. Patent Publication. No. 2003/0117280 to Prehn	RESP_ITC_1242_00008173- RESP_ITC_1242_00008183
Published U.S. App. 2003/0171930 to Junqua	RESP_ITC_1242_00005430- RESP_ITC_1242_00005442
Published U.S. App. 2003/0206101 to Dixon	RESP_ITC_1242_00005443- RESP_ITC_1242_00005450
Published U.S. App. 2004/0003051 to Krzyanowski	RESP_ITC_1242_00005598- RESP_ITC_1242_00005622
Published U.S. App. 2004/0036603 to Bingham	RESP_ITC_1242_00006765- RESP_ITC_1242_00006780
Published U.S. App. 2004/0080615 to Klein	RESP_ITC_1242_00001858- RESP_ITC_1242_00001867
Published U.S. App. 2004/0080627 to Kroll	RESP_ITC_1242_00001868- RESP_ITC_1242_00001885
Published U.S. App. 2005/0001717 to Bohbot	RESP_ITC_1242_00002049- RESP_ITC_1242_00002067
Published U.S. App. 2005/0165612 to Van Rysselberghe	RESP_ITC_1242_00002127- RESP_ITC_1242_00002142
Published U.S. App. 2006/0095539 to Renkis	RESP_ITC_1242_00005630- RESP_ITC_1242_00005651
Published U.S. App. 2006/0171453 to Rohlfing	RESP_ITC_1242_00005652- RESP_ITC_1242_00005693
Published U.S. App. 2007/0162748 to Okayama	RESP_ITC_1242_00007792- RESP_ITC_1242_00007845
Published U.S. App. 2009/0224912 to Sobol	RESP_ITC_1242_00002862- RESP_ITC_1242_00002867

Prior Art Reference	Bates Range
Published U.S. App. 2006/0255931 to Hartsfield	RESP_ITC_1242_00005694- RESP_ITC_1242_00005727
Published U.S. App. 2019/0058720 to Lindquist	RESP_ITC_1242_00007459- RESP_ITC_1242_00007473
U.S. Pat. Pub. No. 2005/0285934 to Carter	RESP_ITC_1242_00002160- RESP_ITC_1242_00002173
U.S. Pat. Pub. No. 2007/0103548 to Carter	RESP_ITC_1242_00005776- RESP_ITC_1242_00005800
U.S. Pat. Pub. No. 2008/0117299 to Carter	RESP_ITC_1242_00002809- RESP_ITC_1242_00002833
Canadian Patent No. 2228679 to Heggie	RESP_ITC_1242_00006698- RESP_ITC_1242_00006720
French Patent No. FR 2759804 to Bonsaglio	RESP_ITC_1242_00001331- RESP_ITC_1242_00001347
United Kingdom Patent Application No. GB2285365 to Yau	RESP_ITC_1242_00001348- RESP_ITC_1242_00001373
Japan Patent No. JPH 09-107409	RESP_ITC_1242_00007775- RESP_ITC_1242_00007783
Korea Patent No. KR 100373449 to Son	RESP_ITC_1242_00001391- RESP_ITC_1242_00001408
Korea Patent No. KR 19980039422 to Sunghwa Kim Won- joon	RESP_ITC_1242_00001417- RESP_ITC_1242_00001421
Korea Patent No. KR 20010074212 to Shin	RESP_ITC_1242_00001422- RESP_ITC_1242_00001425
International Patent No. WO 99/06976 to Meyvis	RESP_ITC_1242_00006972- RESP_ITC_1242_00006995
International Patent No. WO 01/27763 to Simerly	RESP_ITC_1242_00006996- RESP_ITC_1242_00007042
International Patent No. WO 01/50731 to Noyman	RESP_ITC_1242_00005004- RESP_ITC_1242_00005038
International Patent No. WO 01/93220 to Menard	RESP_ITC_1242_00005039- RESP_ITC_1242_00005131
International Patent No. WO 01/097524 to Scaman	RESP_ITC_1242_00006454- RESP_ITC_1242_00006486
International Patent No. WO 02/005220 to Bennett	RESP_ITC_1242_00005132- RESP_ITC_1242_00005152
International Patent No. WO 02/065420 to Vojtech	RESP_ITC_1242_00006487- RESP_ITC_1242_00006509
International Patent No. WO 03/028375 to Hong	RESP_ITC_1242_00007043- RESP_ITC_1242_00007075
International Patent No. WO 2006/046234 to Segel	RESP_ITC_1242_00008520- RESP_ITC_1242_00008521

Prior Art Reference	Bates Range
“Motion Activated Video Surveillance Using TI DSP,” Carnegie Mellon University, August 4-6, 1999, available at https://www.ti.com/sc/docs/general/dsp/fest99/avi/1paper.pdf .	RESP_ITC_1242_00005272- RESP_ITC_1242_00005277
“Video Surveillance Equipment Selection and Application Guide,” NIJ Guide 201-99, October 1999, available at https://www.ojp.gov/pdffiles1/nij/179545.pdf .	RESP_ITC_1242_00006162- RESP_ITC_1242_00006244
“Nanny-Cam May Leave a Home Exposed,” New York Times, April 14, 2002, available at https://www.nytimes.com/2002/04/14/business/nanny-cam-may-leave-a-home-exposed.html .	RESP_ITC_1242_00005278- RESP_ITC_1242_00005282
Duy Nguyen, “Mobile Home Security with GPRS”.	RESP_ITC_1242_00007784- RESP_ITC_1242_00007787
“Scalable Multimedia System for Interactive Surveillance and Video Communication Applications,” IEEE 10th European Signal Processing Conference, September 4-8, 2000, available at https://ieeexplore.ieee.org/document/7075784 .	RESP_ITC_1242_00007788- RESP_ITC_1242_00007791
X10 Wireless Technology, Inc.’s Xcam2, technical user manual, available at http://www.electronicoscaldas.com/datasheet/XCam2-WideEye_X10.pdf .	RESP_ITC_1242_00007694- RESP_ITC_1242_00007695
80211b_Video	RESP_ITC_1242_00007846- RESP_ITC_1242_00007871
Axis 2100 Network Camera Users Guide V.1.2	RESP_ITC_1242_00007872- RESP_ITC_1242_00007929
Axis Communication Press Release_Axis adds wireless capability to its video offerings	RESP_ITC_1242_00007930
[KX-HCM270] Panasonic Network Camera Operating Instructions	RESP_ITC_1242_00008035- RESP_ITC_1242_00008172

2. Prior Art Systems

Prior Art System	Knowledgeable Person(s)
Panasonic Network Cameras, including Model No. KX-HCM270	Panasonic
Axis Network Cameras, including Axis 2100	Axis

B. Anticipation and Obviousness

Respondents attach Exhibits E-1 to E-12, which provide exemplary disclosures showing how the prior art anticipates and/or renders obvious the asserted claims of the ’478 patent. The

charts identify primary references, and in some cases, secondary references and obviousness contentions. Respondents also identify secondary references and obviousness contentions in Exhibit E-13. Respondents may rely on any of the primary references identified in Exhibits E-1 to E-12 in combination with any secondary reference identified in those exhibits or in Exhibit E-13. Respondents’ anticipation contentions are presented in the following exhibits, each of which describes anticipation of one or more claims of the ’478 patent by a primary reference:

Exhibit	Primary Reference
E-1	U.S. Patent No. 6,185,294 (“Chornenky”)
E-2	U.S. Patent No. 5,428,388 (“von Bauer”)
E-3	U.S. Patent Pub. 2004/0080615 (“Klein”)
E-4	U.S. Patent No. 7,956,739 (“Hong”)
E-5	U.S. Patent No. 7,015,943 (“Chiang”)
E-6	U.S. Patent No. 8,619,136 (“Howarter”)
E-7	WO 01/93220 (“Menard”)
E-8	U.S. Patent No. 7,583,191 (“Zinser”)
E-9	Panasonic Network Camera Model No. KX-HCM270 (“Panasonic”)
E-10	Axis 2100 Network Camera (“Axis 2100”)
E-11	WO 02/05220 (“Bennett”)
E-12	U.S. Patent No. 4,524,384 (“Lefkowitz”)

Respondents’ obviousness contentions are also contained in Exhibits E-1 to E-12 and Exhibit E-13.

The U.S. Supreme Court in *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) emphasized that inventions arising from ordinary innovation, ordinary skill, or common sense should not be patentable. *Id.* at 1732, 1738, 1742–1743, 1746. A patent claim may be obvious if the combination of elements was obvious to try or if there existed at the time of the invention a

known problem for which there was an obvious solution encompassed by the patent's claims. When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, Section 103 likely bars its patentability. *Id.* at 1740. The Court stated that courts should “look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740–41. *KSR* does not mandate evidence of a motivation or suggestion to combine prior art references. *See TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 580–81 (E.D. Tex. 2007). “[A] court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ” to resolve the question of obviousness. *KSR*, 127 S. Ct. at 1741.

Based on all of these considerations, as further detailed in Exhibits E-1 to E-12 and Exhibit E-13, persons of ordinary skill in the art would have combined the teachings of the prior art references discussed and charted in those exhibits. The combinations of these references would have rendered obvious to one of ordinary skill in the art the subject matter of the asserted claims of the '478 patent. The references identified in Exhibits E-1 to E-12 and Exhibit E-13 are analogous prior art to the subject matter of the asserted claims and, for at least the reasons set forth below, are properly combinable. Because these prior art references exist within a single field of art, particularly one in which individuals in the field often shared and/or collaborated on their work, it would have been obvious for a person of skill in the art to look from one piece of prior art to another in order to find any missing functionality they desired to implement. Therefore, these references provide interrelated teachings and one of ordinary skill would look to the concepts in

any of these references when seeking to solve the problems purportedly addressed by the '478 patent.

Numerous prior art references, including those identified in the attached exhibits, reflect common knowledge and the state of the prior art before the earliest claimed effective filing date of the '478 patent. As it would be unduly burdensome to create detailed claim charts for all of the invalidating combinations, for at least the reasons described in these invalidity contentions, it would have been obvious to one of ordinary skill in the art to combine any of a number of prior art references, including any combination of those identified in the attached exhibits, to meet the limitations of the asserted claims of the '478 patent. Respondents' inclusion of exemplary combinations, in view of the factors and motivations identified here, does not preclude Respondents from identifying other invalidating combinations and/or motivations as appropriate.

No showing of a specific motivation to combine prior art is required to combine the references disclosed above and in the attached charts, because each combination of art would have no unexpected results, and at most would simply represent a known alternative to one of ordinary skill in the art. *See KSR*, 127 S. Ct. at 1739–40 (rejecting the Federal Circuit's "rigid" application of the teaching, suggestion, or motivation to combine test, instead espousing an "expansive and flexible" approach). Indeed, the Supreme Court held that a person of ordinary skill in the art is "a person of ordinary creativity, not an automaton" and "in many cases a person of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at 1742. Nevertheless, in addition to the information contained herein, Respondents hereby identify additional motivations and reasons to combine the cited art.

One or more combinations of the prior art references identified herein would have been obvious because these references would have been combined using: known methods to yield

predictable results; known techniques in the same way; a simple substitution of one known, equivalent element for another to obtain predictable results; and/or a teaching, suggestion, or motivation in the prior art generally. In addition, it would have been obvious to combine the prior art references identified above because there were only a finite number of predictable solutions and/or because known work in one field of endeavor prompts variations based on predictable design incentives and/or market forces either in the same field or a different one. In addition, the combinations of the prior art references identified above would have been obvious because the combinations represent the known potential options with a reasonable expectation of success.

Additional evidence that there would have been a motivation or reason to combine the prior art references identified above includes the interrelated teachings of multiple prior art references; the effects of demands known to the design community or present in the marketplace; the existence of a known problem for which there was an obvious solution; the existence of a known need or problem in the field of endeavor at the time of the invention; and the background knowledge that would have been possessed by a person having ordinary skill in the art. For example, the prior art references are generally directed to the same problems. Thus, a skilled artisan seeking to solve these problems would look to these cited references in combination.

Thus, the motivation or reason to combine the teachings of the prior art references disclosed herein is found in the references themselves and in: (1) the nature of the problems being solved; (2) the express, implied, and inherent teachings of the prior art; (3) the knowledge of persons of ordinary skill in the art; (4) the fact that the prior art is generally directed towards the same problems; and/or (5) the predictable results obtained in combining the different elements of the prior art; (6) the use of a known technique to improve similar devices, methods, or products in the same way; (7) the predictable results obtained in applying a known technique to a known device,

method, or product ready for improvement; (8) the finite number of identified predictable solutions that had a reasonable expectation of success; and (9) known work in various technological fields that could be applied to the same or different technological fields based on design incentives or other market forces.

In addition, it would have obvious to combine any of the prior art in Exhibits E-1 to E-12 and Exhibit E-13 because all of these references relate to devices and methods relating to networked video transmission and home automation in routine and predictable ways.

Respondents incorporate by reference prior art from the prosecution histories and background sections of the '478 patent. Respondents expect to rely on the testimony of one or more expert witnesses and documents referenced by those expert witnesses in support of these contentions and incorporate those forthcoming expert reports as if fully set forth herein.

Respondents contend that there are no secondary considerations of non-obviousness evidencing the validity of any of the asserted claims. Secondary considerations of non-obviousness, also referred to as objective indicia of non-obviousness, “can include copying, long felt but unsolved need, failure of others, commercial success, unexpected results created by the claimed invention, unexpected properties of the claimed invention, licenses showing industry respect for the invention, awards or other industry praise for the invention, and skepticism of skilled artisans before the invention.” *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1368 (Fed. Cir. 2013). “A nexus between the merits of the claimed invention and evidence of secondary considerations is required in order for the evidence to be given substantial weight in an obviousness decision.” *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 668 (Fed. Cir. 2000). Moreover, even if a nexus exists, secondary considerations of non-obviousness “simply cannot overcome [a] strong prima facie showing of obviousness.” *Sundance, Inc. v.*

DeMonte Fabricating Ltd., 550 F.3d 1356, 1368 (Fed. Cir. 2008). Complainants have not established the existence of any objective indicia of non-obviousness or secondary considerations. Respondents reserve the right to supplement their contentions to respond to any such evidence should Complainants be permitted to raise them in the future. While discovery in this case is ongoing, and Respondents' investigation continues (which will include expert discovery), to the extent Complainants contend that one or more asserted claims is not obvious based on secondary considerations recognized by relevant authority Respondents contend such allegations are without merit. For example, Complainants have provided no evidence of copying of the purported inventions of the asserted claims.

Complainants also have not identified any evidence that the purported inventions of the asserted claims have enjoyed any commercial success. Similarly, Complainants have provided no evidence of any failure of others to realize any purported inventions of the asserted claims, or any evidence of any long felt but unsolved need solved by the purported inventions of the asserted claims. To the contrary, the relative novelty and widespread availability of video doorbell technology is contrary evidence of any long-felt need for the purported inventions of the asserted claims.

C. Other Invalidity Grounds

Respondents hereby identify grounds of invalidity based on (1) lack of written description under 35 U.S.C. § 112(a); (2) lack of enablement under 35 U.S.C. § 112(a); and (3) indefiniteness under 35 U.S.C. § 112 (b). These contentions shall not be construed as an admission that any claim construction advanced by Respondents in this case is in any way inconsistent, flawed, or erroneous. Nor should these contentions prevent Respondents from advancing claim construction and/or non-infringement positions in lieu of, or in addition to, invalidity positions. Further, these

contentions shall not be construed as an admission of or acquiescence to Complainants' purported construction of the claim language or of other positions advanced by Complainants during the course of this litigation. Respondents' Invalidity Contentions under 35 U.S.C. § 112 may depend, in part, on the Court's claim construction, as well as Complainants' alleged scope of the asserted claims of the '478 patent. Consequently, Respondents only identify the issues under 35 U.S.C. § 112 of which they are presently aware.

1. Enablement and/or Written Description Pursuant to 35 U.S.C. § 112(a)

The '478 patent does not provide sufficient written description to establish that the alleged inventors were in possession of the alleged inventions recited in certain of the asserted claims of the '478 patent at the time the '478 patent was filed. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). In other words, the applicants did not describe their purported inventions in a manner that “reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* The specification of the '478 patent also does not enable one of ordinary skill in the art to make and/or use certain recited elements of the asserted claims of the '478 patent without undue experimentation.

To the extent the following limitations are definite (under 35 U.S.C. § 112, second paragraph), the '478 patent fails to sufficiently describe or enable them as required by 35 U.S.C. § 112, first paragraph: “real-time,” “each of said at least one peripheral devices associated with a respective user”; “a wireless device comprising a video camera, a speaker, a microphone, and a keypad having one or more buttons”; “a computer configured for wireless communication with the wireless device to receive digital real-time digital streaming video data, wherein said computer is configured for communication with each of said at least one peripheral devices to transmit the digital real-time digital video data to at least one peripheral device”; “the association of each of

the at last one peripheral device with a respective user is maintained”; and “wherein said wireless device comprises a proximity sensor located within the wireless device for detecting the presence of a person.” Respondents also incorporate by reference Section XIII below.

2. Indefiniteness Pursuant to 35 U.S.C. § 112(b)

Several of the asserted claims of the ’478 patent are invalid because they fail to inform those skilled in the art about the scope of the alleged invention with reasonable certainty and are indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter the applicants regard as their alleged invention.

Certain asserted claims of the ’478 patent are invalid as indefinite due to the following limitations which fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention: “each of said at least one peripheral devices associated with a respective user.”

X. U.S. PATENT NO. 10,674,120

A. Relevant Prior Art

Respondents contend that the prior art references identified in Respondents’ contentions anticipate or render obvious the asserted claims. Based on the information reasonably available to Respondents, the priority date of the asserted claims of the ’120 patent is no earlier than December 29, 2006, the filing date of the ’581 patent to which the ’120 patent claims priority. The ’581 patent is a continuation-in-part of the ’644 patent and introduced new matter. Despite having the burden of proof, Complainants have offered no evidence that any asserted claim of the ’120 patent is entitled to a priority date earlier than December 29, 2006. Below, Respondents list some of the prior art cited in these contentions:

1. Patents and Printed Publications

Prior Art Reference	Bates Range
U.S. Patent No. 3,480,727 to Moore	RESP_ITC_1242_00007696- RESP_ITC_1242_00007704

Prior Art Reference	Bates Range
U.S. Patent No. 4,075,659 to Desanti	RESP_ITC_1242_00007705- RESP_ITC_1242_00007711
U.S. Patent No. 4,370,675 to Cohn	RESP_ITC_1242_00007712- RESP_ITC_1242_00007719
U.S. Patent No. 4,524,384 to Lefkowitz	RESP_ITC_1242_00007720- RESP_ITC_1242_00007732
U.S. Patent No. 4,764,953 to Chern	RESP_ITC_1242_00007733- RESP_ITC_1242_00007741
U.S. Patent No. 4,843,461 to Tatsumi	RESP_ITC_1242_00007742- RESP_ITC_1242_00007757
U.S. Patent No. 4,959,713 to Morotomi	RESP_ITC_1242_00007758- RESP_ITC_1242_00007774
U.S. Patent No. 5,151,945 to Lee	RESP_ITC_1242_00006781- RESP_ITC_1242_00006794
U.S. Patent No. 5,428,388 to von Bauer	RESP_ITC_1242_00007474- RESP_ITC_1242_00007498
U.S. Patent No. 5,717,379 to Peters	RESP_ITC_1242_00003087- RESP_ITC_1242_00003093
U.S. Patent No. 5,822,542 to Smith	RESP_ITC_1242_00005889- RESP_ITC_1242_00006097
U.S. Patent No. 5,861,804 to Fansa	RESP_ITC_1242_00006795- RESP_ITC_1242_00006803
U.S. Patent No. 5,878,283 to House	RESP_ITC_1242_00006804- RESP_ITC_1242_00006825
U.S. Patent No. 6,060,994 to Chen	RESP_ITC_1242_00007499- RESP_ITC_1242_00007513
U.S. Patent No. 6,064,303 to Klein	RESP_ITC_1242_00006826- RESP_ITC_1242_00006840
U.S. Patent No. 6,069,655 to Seeley	RESP_ITC_1242_00003234- RESP_ITC_1242_00003257
U.S. Patent No. 6,097,429 to Seeley	RESP_ITC_1242_00006841- RESP_ITC_1242_00006855
U.S. Patent No. 6,104,785 to Chen	RESP_ITC_1242_00007514- RESP_ITC_1242_00007521
U.S. Patent No. 6,134,303 to Chen	RESP_ITC_1242_00007522- RESP_ITC_1242_00007529
U.S. Patent No. 6,185,294 to Chornenky	RESP_ITC_1242_00007530- RESP_ITC_1242_00007540
U.S. Patent No. 6,323,897 to Kogane	RESP_ITC_1242_00006098- RESP_ITC_1242_00006109
U.S. Patent No. 6,359,560 to Budge	RESP_ITC_1242_00006110- RESP_ITC_1242_00006127
U.S. Patent No. 6,385,772 to Courtney	RESP_ITC_1242_00003405- RESP_ITC_1242_00003413

Prior Art Reference	Bates Range
U.S. Patent No. 6,400,265 to Saylor	RESP_ITC_1242_00006856- RESP_ITC_1242_00006883
U.S. Patent No. 6,421,080 to Lambert	RESP_ITC_1242_00006884- RESP_ITC_1242_00006893
U.S. Patent No. 6,424,371 to Wen	RESP_ITC_1242_00006894- RESP_ITC_1242_00006905
U.S. Patent No. 6,476,858 to Diaz	RESP_ITC_1242_00006128- RESP_ITC_1242_00006145
U.S. Patent No. 6,542,078 to Script	RESP_ITC_1242_00007541- RESP_ITC_1242_00007557
U.S. Patent No. 6,816,085 to Haynes	RESP_ITC_1242_00006906- RESP_ITC_1242_00006923
U.S. Patent No. 6,828,909 to Script	RESP_ITC_1242_00007558- RESP_ITC_1242_00007586
U.S. Patent No. 6,943,682 to Dowens	RESP_ITC_1242_00003831- RESP_ITC_1242_00003841
U.S. Patent No. 6,956,478 to Oyagi	RESP_ITC_1242_00006924- RESP_ITC_1242_00006971
U.S. Patent No. 7,012,523 to Stuart	RESP_ITC_1242_00004004- RESP_ITC_1242_00004014
U.S. Patent No. 7,015,943 to Chiang	RESP_ITC_1242_00004040- RESP_ITC_1242_00004054
U.S. Patent No. 7,019,770 to Katz	RESP_ITC_1242_00004072- RESP_ITC_1242_00004100
U.S. Patent No. 7,113,090 to Saylor	RESP_ITC_1242_00007587- RESP_ITC_1242_00007626
U.S. Patent No. 7,119,609 to Naidoo	RESP_ITC_1242_00007627- RESP_ITC_1242_00007646
U.S. Patent No. 7,123,142 to Bohbot	RESP_ITC_1242_00008184- RESP_ITC_1242_00008201
U.S. Patent No. 7,187,279 to Chung	RESP_ITC_1242_00008202- RESP_ITC_1242_00008225
U.S. Patent No. 7,193,644 to Carter	RESP_ITC_1242_00004259- RESP_ITC_1242_00004272
U.S. Patent No. 7,242,295 to Milinusic	RESP_ITC_1242_00004273- RESP_ITC_1242_00004316
U.S. Patent No. 7,262,690 to Heaton	RESP_ITC_1242_00008226- RESP_ITC_1242_00008244
U.S. Patent No. 7,277,010 to Joao	RESP_ITC_1242_00004322- RESP_ITC_1242_00004411
U.S. Patent No. 7,310,111 to Ramirez-Diaz	RESP_ITC_1242_00008017- RESP_ITC_1242_00008034
U.S. Patent No. 7,403,116 to Bittner	RESP_ITC_1242_00008245- RESP_ITC_1242_00008256

Prior Art Reference	Bates Range
U.S. Patent No. 7,529,485 to Farmer	RESP_ITC_1242_00008257- RESP_ITC_1242_00008311
U.S. Patent No. 7,609,941 to Matsukawa	RESP_ITC_1242_00008312- RESP_ITC_1242_00008364
U.S. Patent No. 7,786,891 to Owens	RESP_ITC_1242_00008365- RESP_ITC_1242_00008383
U.S. Patent No. 7,952,609 to Simerly	RESP_ITC_1242_00008384- RESP_ITC_1242_00008409
U.S. Patent No. 7,956,739 to Hong	RESP_ITC_1242_00008410- RESP_ITC_1242_00008428
U.S. Patent No. 8,154,581 to Carter	RESP_ITC_1242_00007386- RESP_ITC_1242_00007409
U.S. Patent No. 8,164,614 to Carter	RESP_ITC_1242_00007410- RESP_ITC_1242_00007434
U.S. Patent No. 8,520,068 to Naidoo	RESP_ITC_1242_00004713- RESP_ITC_1242_00004735
U.S. Patent No. 8,619,136 to Howarter	RESP_ITC_1242_00008429- RESP_ITC_1242_00008445
U.S. Patent No. 8,948,245 to Henson	RESP_ITC_1242_00008446- RESP_ITC_1242_00008519
U.S. Patent No. 9,250,267 to Jackson	RESP_ITC_1242_00006146- RESP_ITC_1242_00006161
U.S. Patent No. 9,300,921 to Naidoo	RESP_ITC_1242_00007647- RESP_ITC_1242_00007670
U.S. Patent No. 9,579,913 to Menard	RESP_ITC_1242_00007944- RESP_ITC_1242_00008016
Published U.S. App. 2002/0016971 to Berezowski	RESP_ITC_1242_00005283- RESP_ITC_1242_00005325
Published U.S. App. 2002/0030583 to Jang	RESP_ITC_1242_00001473- RESP_ITC_1242_00001479
Published U.S. App. 2002/0067259 to Fufidio	RESP_ITC_1242_00005326- RESP_ITC_1242_00005343
Published U.S. App. 2002/0071031 to Lord	RESP_ITC_1242_00006721- RESP_ITC_1242_00006728
Published U.S. App. 2002/0075307 to Alexander	RESP_ITC_1242_00001493- RESP_ITC_1242_00001520
Published U.S. App. 2002/0076049 to Boykin	RESP_ITC_1242_00006729- RESP_ITC_1242_00006741
Published U.S. App. 2002/0118283 to Guerrero	RESP_ITC_1242_00001541- RESP_ITC_1242_00001567
Published U.S. App. 2002/0147982 to Naidoo	RESP_ITC_1242_00001568- RESP_ITC_1242_00001591
Published U.S. App. 2003/0046557 to Miller	RESP_ITC_1242_00005344- RESP_ITC_1242_00005387

Prior Art Reference	Bates Range
Published U.S. App. 2003/0061344 to Monroe	RESP_ITC_1242_00005451- RESP_ITC_1242_00005597
Published U.S. App. 2003/0062997 to Naidoo	RESP_ITC_1242_00006742- RESP_ITC_1242_00006764
Published U.S. App. 2003/0071724 to D'Amico	RESP_ITC_1242_00007443- RESP_ITC_1242_00007458
Published U.S. App. 2003/0075287 to Weik	RESP_ITC_1242_00005388- RESP_ITC_1242_00005405
Published U.S. App. 2003/0081747 to Ahlstrom	RESP_ITC_1242_00005406- RESP_ITC_1242_00005419
Published U.S. App. 2003/0095184 to Lin	RESP_ITC_1242_00001744- RESP_ITC_1242_00001749
Published U.S. App. 2003/0095185 to Naifeh	RESP_ITC_1242_00001750- RESP_ITC_1242_00001771
Published U.S. App. 2003/0103138 to Assayag	RESP_ITC_1242_00005420- RESP_ITC_1242_00005429
Published U.S. App. 2003/0122514 to Mercier	RESP_ITC_1242_00001772- RESP_ITC_1242_00001780
U.S. Patent Publication. No. 2003/0117280 to Prehn	RESP_ITC_1242_00008173- RESP_ITC_1242_00008183
Published U.S. App. 2003/0171930 to Junqua	RESP_ITC_1242_00005430- RESP_ITC_1242_00005442
Published U.S. App. 2003/0206101 to Dixon	RESP_ITC_1242_00005443- RESP_ITC_1242_00005450
Published U.S. App. 2004/0003051 to Krzyanowski	RESP_ITC_1242_00005598- RESP_ITC_1242_00005622
Published U.S. App. 2004/0036603 to Bingham	RESP_ITC_1242_00006765- RESP_ITC_1242_00006780
Published U.S. App. 2004/0080615 to Klein	RESP_ITC_1242_00001858- RESP_ITC_1242_00001867
Published U.S. App. 2004/0080627 to Kroll	RESP_ITC_1242_00001868- RESP_ITC_1242_00001885
Published U.S. App. 2005/0001717 to Bohbot	RESP_ITC_1242_00002049- RESP_ITC_1242_00002067
Published U.S. App. 2005/0165612 to Van Rysselberghe	RESP_ITC_1242_00002127- RESP_ITC_1242_00002142
Published U.S. App. 2006/0095539 to Renkis	RESP_ITC_1242_00005630- RESP_ITC_1242_00005651
Published U.S. App. 2006/0171453 to Rohlfing	RESP_ITC_1242_00005652- RESP_ITC_1242_00005693
Published U.S. App. 2007/0162748 to Okayama	RESP_ITC_1242_00007792- RESP_ITC_1242_00007845
Published U.S. App. 2009/0224912 to Sobol	RESP_ITC_1242_00002862- RESP_ITC_1242_00002867

Prior Art Reference	Bates Range
Published U.S. App. 2006/0255931 to Hartsfield	RESP_ITC_1242_00005694- RESP_ITC_1242_00005727
Published U.S. App. 2019/0058720 to Lindquist	RESP_ITC_1242_00007459- RESP_ITC_1242_00007473
U.S. Pat. Pub. No. 2005/0285934 to Carter	RESP_ITC_1242_00002160- RESP_ITC_1242_00002173
U.S. Pat. Pub. No. 2007/0103548 to Carter	RESP_ITC_1242_00005776- RESP_ITC_1242_00005800
U.S. Pat. Pub. No. 2008/0117299 to Carter	RESP_ITC_1242_00002809- RESP_ITC_1242_00002833
Canadian Patent No. 2228679 to Heggie	RESP_ITC_1242_00006698- RESP_ITC_1242_00006720
French Patent No. FR 2759804 to Bonsaglio	RESP_ITC_1242_00001331- RESP_ITC_1242_00001347
United Kingdom Patent Application No. GB2285365 to Yau	RESP_ITC_1242_00001348- RESP_ITC_1242_00001373
Japan Patent No. JPH 09-107409	RESP_ITC_1242_00007775- RESP_ITC_1242_00007783
Korea Patent No. KR 100373449 to Son	RESP_ITC_1242_00001391- RESP_ITC_1242_00001408
Korea Patent No. KR 19980039422 to Sunghwa Kim Won- joon	RESP_ITC_1242_00001417- RESP_ITC_1242_00001421
Korea Patent No. KR 20010074212 to Shin	RESP_ITC_1242_00001422- RESP_ITC_1242_00001425
International Patent No. WO 99/06976 to Meyvis	RESP_ITC_1242_00006972- RESP_ITC_1242_00006995
International Patent No. WO 01/27763 to Simerly	RESP_ITC_1242_00006996- RESP_ITC_1242_00007042
International Patent No. WO 01/50731 to Noyman	RESP_ITC_1242_00005004- RESP_ITC_1242_00005038
International Patent No. WO 01/93220 to Menard	RESP_ITC_1242_00005039- RESP_ITC_1242_00005131
International Patent No. WO 01/097524 to Scaman	RESP_ITC_1242_00006454- RESP_ITC_1242_00006486
International Patent No. WO 02/005220 to Bennett	RESP_ITC_1242_00005132- RESP_ITC_1242_00005152
International Patent No. WO 02/065420 to Vojtech	RESP_ITC_1242_00006487- RESP_ITC_1242_00006509
International Patent No. WO 03/028375 to Hong	RESP_ITC_1242_00007043- RESP_ITC_1242_00007075
International Patent No. WO 2006/046234 to Segel	RESP_ITC_1242_00008520- RESP_ITC_1242_00008521

Prior Art Reference	Bates Range
“Motion Activated Video Surveillance Using TI DSP,” Carnegie Mellon University, August 4-6, 1999, available at https://www.ti.com/sc/docs/general/dsp/fest99/avi/1paper.pdf .	RESP_ITC_1242_00005272- RESP_ITC_1242_00005277
“Video Surveillance Equipment Selection and Application Guide,” NIJ Guide 201-99, October 1999, available at https://www.ojp.gov/pdffiles1/nij/179545.pdf .	RESP_ITC_1242_00006162- RESP_ITC_1242_00006244
“Nanny-Cam May Leave a Home Exposed,” New York Times, April 14, 2002, available at https://www.nytimes.com/2002/04/14/business/nanny-cam-may-leave-a-home-exposed.html .	RESP_ITC_1242_00005278- RESP_ITC_1242_00005282
Duy Nguyen, “Mobile Home Security with GPRS”.	RESP_ITC_1242_00007784- RESP_ITC_1242_00007787
“Scalable Multimedia System for Interactive Surveillance and Video Communication Applications,” IEEE 10th European Signal Processing Conference, September 4-8, 2000, available at https://ieeexplore.ieee.org/document/7075784 .	RESP_ITC_1242_00007788- RESP_ITC_1242_00007791
X10 Wireless Technology, Inc.’s Xcam2, technical user manual, available at http://www.electronicoscaldas.com/datasheet/XCam2-WideEye_X10.pdf .	RESP_ITC_1242_00007694- RESP_ITC_1242_00007695
80211b_Video	RESP_ITC_1242_00007846- RESP_ITC_1242_00007871
Axis 2100 Network Camera Users Guide V.1.2	RESP_ITC_1242_00007872- RESP_ITC_1242_00007929
Axis Communication Press Release_Axis adds wireless capability to its video offerings	RESP_ITC_1242_00007930
[KX-HCM270] Panasonic Network Camera Operating Instructions	RESP_ITC_1242_00008035- RESP_ITC_1242_00008172

2. Prior Art Systems

Prior Art System	Knowledgeable Person(s)
Panasonic Network Cameras, including Model No. KX-HCM270	Panasonic
Axis Network Cameras, including Axis 2100	Axis

B. Anticipation and Obviousness

Respondents attach Exhibits F-1 to F-12, which provide exemplary disclosures showing how the prior art anticipates and/or renders obvious the asserted claims of the ’120 patent. The

charts identify primary references, and in some cases, secondary references and obviousness contentions. Respondents also identify secondary references and obviousness contentions in Exhibit F-13. Respondents may rely on any of the primary references identified in Exhibits F-1 to F-12 in combination with any secondary reference identified in those exhibits or in Exhibit F-13. Respondents' anticipation contentions are presented in the following exhibits, each of which describes anticipation of one or more claims of the '120 patent by a primary reference:

Exhibit	Primary Reference
F-1	U.S. Patent No. 6,185,294 ("Chornenky")
F-2	U.S. Patent No. 5,428,388 ("von Bauer")
F-3	U.S. Patent Pub. 2004/0080615 ("Klein")
F-4	U.S. Patent No. 7,956,739 ("Hong")
F-5	U.S. Patent No. 7,015,943 ("Chiang")
F-6	U.S. Patent No. 8,619,136 ("Howarter")
F-7	WO 01/93220 ("Menard")
F-8	U.S. Patent No. 7,583,191 ("Zinser")
F-9	Panasonic Network Camera Model No. KX-HCM270 ("Panasonic")
F-10	Axis 2100 Network Camera ("Axis 2100")
F-11	WO 02/05220 ("Bennett")
F-12	U.S. Patent No. 4,524,384 ("Lefkowitz")

Respondents' obviousness contentions are also contained in Exhibits F-1 to F-12 and Exhibit F-13.

The U.S. Supreme Court in *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) emphasized that inventions arising from ordinary innovation, ordinary skill, or common sense should not be patentable. *Id.* at 1732, 1738, 1742–1743, 1746. A patent claim may be obvious if the combination of elements was obvious to try or if there existed at the time of the invention a

known problem for which there was an obvious solution encompassed by the patent's claims. When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, Section 103 likely bars its patentability. *Id.* at 1740. The Court stated that courts should “look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740–41. *KSR* does not mandate evidence of a motivation or suggestion to combine prior art references. *See TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 580–81 (E.D. Tex. 2007). “[A] court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ” to resolve the question of obviousness. *KSR*, 127 S. Ct. at 1741.

Based on all of these considerations, as further detailed in Exhibits F-1 to F-12 and Exhibit F-13, persons of ordinary skill in the art would have combined the teachings of the prior art references discussed and charted in those exhibits. The combinations of these references would have rendered obvious to one of ordinary skill in the art the subject matter of the asserted claims of the '120 patent. The references identified in Exhibits F-1 to F-12 and Exhibit F-13 are analogous prior art to the subject matter of the asserted claims and, for at least the reasons set forth below, are properly combinable. Because these prior art references exist within a single field of art, particularly one in which individuals in the field often shared and/or collaborated on their work, it would have been obvious for a person of skill in the art to look from one piece of prior art to another in order to find any missing functionality they desired to implement. Therefore, these references provide interrelated teachings and one of ordinary skill would look to the concepts in

any of these references when seeking to solve the problems purportedly addressed by the '120 patent.

Numerous prior art references, including those identified in the attached exhibits, reflect common knowledge and the state of the prior art before the earliest claimed effective filing date of the '120 patent. As it would be unduly burdensome to create detailed claim charts for all of the invalidating combinations, for at least the reasons described in these invalidity contentions, it would have been obvious to one of ordinary skill in the art to combine any of a number of prior art references, including any combination of those identified in the attached exhibits, to meet the limitations of the asserted claims of the '120 patent. Respondents' inclusion of exemplary combinations, in view of the factors and motivations identified here, does not preclude Respondents from identifying other invalidating combinations and/or motivations as appropriate.

No showing of a specific motivation to combine prior art is required to combine the references disclosed above and in the attached charts, because each combination of art would have no unexpected results, and at most would simply represent a known alternative to one of ordinary skill in the art. *See KSR*, 127 S. Ct. at 1739–40 (rejecting the Federal Circuit's "rigid" application of the teaching, suggestion, or motivation to combine test, instead espousing an "expansive and flexible" approach). Indeed, the Supreme Court held that a person of ordinary skill in the art is "a person of ordinary creativity, not an automaton" and "in many cases a person of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at 1742. Nevertheless, in addition to the information contained herein, Respondents hereby identify additional motivations and reasons to combine the cited art.

One or more combinations of the prior art references identified herein would have been obvious because these references would have been combined using: known methods to yield

predictable results; known techniques in the same way; a simple substitution of one known, equivalent element for another to obtain predictable results; and/or a teaching, suggestion, or motivation in the prior art generally. In addition, it would have been obvious to combine the prior art references identified above because there were only a finite number of predictable solutions and/or because known work in one field of endeavor prompts variations based on predictable design incentives and/or market forces either in the same field or a different one. In addition, the combinations of the prior art references identified above would have been obvious because the combinations represent the known potential options with a reasonable expectation of success.

Additional evidence that there would have been a motivation or reason to combine the prior art references identified above includes the interrelated teachings of multiple prior art references; the effects of demands known to the design community or present in the marketplace; the existence of a known problem for which there was an obvious solution; the existence of a known need or problem in the field of endeavor at the time of the invention; and the background knowledge that would have been possessed by a person having ordinary skill in the art. For example, the prior art references are generally directed to the same problems. Thus, a skilled artisan seeking to solve these problems would look to these cited references in combination.

Thus, the motivation or reason to combine the teachings of the prior art references disclosed herein is found in the references themselves and in: (1) the nature of the problems being solved; (2) the express, implied, and inherent teachings of the prior art; (3) the knowledge of persons of ordinary skill in the art; (4) the fact that the prior art is generally directed towards the same problems; and/or (5) the predictable results obtained in combining the different elements of the prior art; (6) the use of a known technique to improve similar devices, methods, or products in the same way; (7) the predictable results obtained in applying a known technique to a known device,

method, or product ready for improvement; (8) the finite number of identified predictable solutions that had a reasonable expectation of success; and (9) known work in various technological fields that could be applied to the same or different technological fields based on design incentives or other market forces.

In addition, it would have obvious to combine any of the prior art in Exhibits F-1 to F-12 and Exhibit F-13 because all of these references relate to devices and methods relating to networked video transmission and home automation in routine and predictable ways.

Respondents incorporate by reference prior art from the prosecution histories and background sections of the '120 patent. Respondents expect to rely on the testimony of one or more expert witnesses and documents referenced by those expert witnesses in support of these contentions and incorporate those forthcoming expert reports as if fully set forth herein.

Respondents contend that there are no secondary considerations of non-obviousness evidencing the validity of any of the asserted claims. Secondary considerations of non-obviousness, also referred to as objective indicia of non-obviousness, “can include copying, long felt but unsolved need, failure of others, commercial success, unexpected results created by the claimed invention, unexpected properties of the claimed invention, licenses showing industry respect for the invention, awards or other industry praise for the invention, and skepticism of skilled artisans before the invention.” *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1368 (Fed. Cir. 2013). “A nexus between the merits of the claimed invention and evidence of secondary considerations is required in order for the evidence to be given substantial weight in an obviousness decision.” *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 668 (Fed. Cir. 2000). Moreover, even if a nexus exists, secondary considerations of non-obviousness “simply cannot overcome [a] strong prima facie showing of obviousness.” *Sundance, Inc. v.*

DeMonte Fabricating Ltd., 550 F.3d 1356, 1368 (Fed. Cir. 2008). Complainants have not established the existence of any objective indicia of non-obviousness or secondary considerations. Respondents reserve the right to supplement their contentions to respond to any such evidence should Complainants be permitted to raise them in the future. While discovery in this case is ongoing, and Respondents' investigation continues (which will include expert discovery), to the extent Complainants contend that one or more asserted claims is not obvious based on secondary considerations recognized by relevant authority Respondents contend such allegations are without merit. For example, Complainants have provided no evidence of copying of the purported inventions of the asserted claims.

Complainants also have not identified any evidence that the purported inventions of the asserted claims have enjoyed any commercial success. Similarly, Complainants have provided no evidence of any failure of others to realize any purported inventions of the asserted claims, or any evidence of any long felt but unsolved need solved by the purported inventions of the asserted claims. To the contrary, the relative novelty and widespread availability of video doorbell technology is contrary evidence of any long-felt need for the purported inventions of the asserted claims.

C. Other Invalidity Grounds

Respondents hereby identify grounds of invalidity based on (1) lack of written description under 35 U.S.C. § 112(a); (2) lack of enablement under 35 U.S.C. § 112(a); and (3) indefiniteness under 35 U.S.C. § 112 (b). These contentions shall not be construed as an admission that any claim construction advanced by Respondents in this case is in any way inconsistent, flawed, or erroneous. Nor should these contentions prevent Respondents from advancing claim construction and/or non-infringement positions in lieu of, or in addition to, invalidity positions. Further, these

contentions shall not be construed as an admission of or acquiescence to Complainants' purported construction of the claim language or of other positions advanced by Complainants during the course of this litigation. Respondents' Invalidity Contentions under 35 U.S.C. § 112 may depend, in part, on the Court's claim construction, as well as Complainants' alleged scope of the asserted claims of the '120 patent. Consequently, Respondents only identify the issues under 35 U.S.C. § 112 of which they are presently aware.

1. Enablement and/or Written Description Pursuant to 35 U.S.C. § 112(a)

The '120 patent does not provide sufficient written description to establish that the alleged inventors were in possession of the alleged inventions recited in certain of the asserted claims of the '120 patent at the time the '120 patent was filed. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). In other words, the applicants did not describe their purported inventions in a manner that “reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* The specification of the '120 patent also does not enable one of ordinary skill in the art to make and/or use certain recited elements of the asserted claims of the '120 patent without undue experimentation.

To the extent the following limitations are definite (under 35 U.S.C. § 112, second paragraph), the '120 patent fails to sufficiently describe or enable them as required by 35 U.S.C. § 112, first paragraph: “a peripheral device, which is a smartphone”; “a software application capable of operating on a smartphone, wherein the software application is capable of (a) displaying the digital streaming video and at the same time displaying at least one icon; (b) displaying recorded video; and (c) modifying one or more control parameters associated with the device”; “control parameters”; “wherein the device is capable of wirelessly transmitting digital streaming video to a peripheral device, which is a smartphone, upon detection of a person by the motion

sensor”; and “a database comprising a hierarchy of storage for the digital streaming video captured by the device.” Respondents also incorporate by reference Section XIII below.

XI. U.S. PATENT NO. 9,432,638

A. Relevant Prior Art

Respondents contend that the prior art references identified in Respondents’ contentions anticipate or render obvious the asserted claims. Based on the information reasonably available to Respondents, the priority date of the asserted claims of the ’638 patent is no earlier than December 29, 2006, the filing date of the ’581 patent to which the ’638 patent claims priority. The ’581 patent is a continuation-in-part of the ’644 patent and introduced new matter. Despite having the burden of proof, Complainants have offered no evidence that any asserted claim of the ’638 patent is entitled to a priority date earlier than December 29, 2006. Below, Respondents list some of the prior art cited in these contentions:

1. Patents and Printed Publications

Prior Art Reference	Bates Range
U.S. Patent No. 3,480,727 to Moore	RESP_ITC_1242_00007696- RESP_ITC_1242_00007704
U.S. Patent No. 4,075,659 to Desanti	RESP_ITC_1242_00007705- RESP_ITC_1242_00007711
U.S. Patent No. 4,370,675 to Cohn	RESP_ITC_1242_00007712- RESP_ITC_1242_00007719
U.S. Patent No. 4,524,384 to Lefkowitz	RESP_ITC_1242_00007720- RESP_ITC_1242_00007732
U.S. Patent No. 4,764,953 to Chern	RESP_ITC_1242_00007733- RESP_ITC_1242_00007741
U.S. Patent No. 4,843,461 to Tatsumi	RESP_ITC_1242_00007742- RESP_ITC_1242_00007757
U.S. Patent No. 4,959,713 to Morotomi	RESP_ITC_1242_00007758- RESP_ITC_1242_00007774
U.S. Patent No. 5,151,945 to Lee	RESP_ITC_1242_00006781- RESP_ITC_1242_00006794
U.S. Patent No. 5,428,388 to von Bauer	RESP_ITC_1242_00007474- RESP_ITC_1242_00007498
U.S. Patent No. 5,717,379 to Peters	RESP_ITC_1242_00003087-

Prior Art Reference	Bates Range
	RESP_ITC_1242_00003093
U.S. Patent No. 5,822,542 to Smith	RESP_ITC_1242_00005889- RESP_ITC_1242_00006097
U.S. Patent No. 5,861,804 to Fansa	RESP_ITC_1242_00006795- RESP_ITC_1242_00006803
U.S. Patent No. 5,878,283 to House	RESP_ITC_1242_00006804- RESP_ITC_1242_00006825
U.S. Patent No. 6,060,994 to Chen	RESP_ITC_1242_00007499- RESP_ITC_1242_00007513
U.S. Patent No. 6,064,303 to Klein	RESP_ITC_1242_00006826- RESP_ITC_1242_00006840
U.S. Patent No. 6,069,655 to Seeley	RESP_ITC_1242_00003234- RESP_ITC_1242_00003257
U.S. Patent No. 6,097,429 to Seeley	RESP_ITC_1242_00006841- RESP_ITC_1242_00006855
U.S. Patent No. 6,104,785 to Chen	RESP_ITC_1242_00007514- RESP_ITC_1242_00007521
U.S. Patent No. 6,134,303 to Chen	RESP_ITC_1242_00007522- RESP_ITC_1242_00007529
U.S. Patent No. 6,185,294 to Chornenky	RESP_ITC_1242_00007530- RESP_ITC_1242_00007540
U.S. Patent No. 6,323,897 to Kogane	RESP_ITC_1242_00006098- RESP_ITC_1242_00006109
U.S. Patent No. 6,359,560 to Budge	RESP_ITC_1242_00006110- RESP_ITC_1242_00006127
U.S. Patent No. 6,385,772 to Courtney	RESP_ITC_1242_00003405- RESP_ITC_1242_00003413
U.S. Patent No. 6,400,265 to Saylor	RESP_ITC_1242_00006856- RESP_ITC_1242_00006883
U.S. Patent No. 6,421,080 to Lambert	RESP_ITC_1242_00006884- RESP_ITC_1242_00006893
U.S. Patent No. 6,424,371 to Wen	RESP_ITC_1242_00006894- RESP_ITC_1242_00006905
U.S. Patent No. 6,476,858 to Diaz	RESP_ITC_1242_00006128- RESP_ITC_1242_00006145
U.S. Patent No. 6,542,078 to Script	RESP_ITC_1242_00007541- RESP_ITC_1242_00007557
U.S. Patent No. 6,816,085 to Haynes	RESP_ITC_1242_00006906- RESP_ITC_1242_00006923
U.S. Patent No. 6,828,909 to Script	RESP_ITC_1242_00007558- RESP_ITC_1242_00007586
U.S. Patent No. 6,943,682 to Dowens	RESP_ITC_1242_00003831- RESP_ITC_1242_00003841
U.S. Patent No. 6,956,478 to Oyagi	RESP_ITC_1242_00006924-

Prior Art Reference	Bates Range
	RESP_ITC_1242_00006971
U.S. Patent No. 7,012,523 to Stuart	RESP_ITC_1242_00004004- RESP_ITC_1242_00004014
U.S. Patent No. 7,015,943 to Chiang	RESP_ITC_1242_00004040- RESP_ITC_1242_00004054
U.S. Patent No. 7,019,770 to Katz	RESP_ITC_1242_00004072- RESP_ITC_1242_00004100
U.S. Patent No. 7,113,090 to Saylor	RESP_ITC_1242_00007587- RESP_ITC_1242_00007626
U.S. Patent No. 7,119,609 to Naidoo	RESP_ITC_1242_00007627- RESP_ITC_1242_00007646
U.S. Patent No. 7,123,142 to Bohbot	RESP_ITC_1242_00008184- RESP_ITC_1242_00008201
U.S. Patent No. 7,187,279 to Chung	RESP_ITC_1242_00008202- RESP_ITC_1242_00008225
U.S. Patent No. 7,193,644 to Carter	RESP_ITC_1242_00004259- RESP_ITC_1242_00004272
U.S. Patent No. 7,242,295 to Milinusic	RESP_ITC_1242_00004273- RESP_ITC_1242_00004316
U.S. Patent No. 7,262,690 to Heaton	RESP_ITC_1242_00008226- RESP_ITC_1242_00008244
U.S. Patent No. 7,277,010 to Joao	RESP_ITC_1242_00004322- RESP_ITC_1242_00004411
U.S. Patent No. 7,310,111 to Ramirez-Diaz	RESP_ITC_1242_00008017- RESP_ITC_1242_00008034
U.S. Patent No. 7,403,116 to Bittner	RESP_ITC_1242_00008245- RESP_ITC_1242_00008256
U.S. Patent No. 7,529,485 to Farmer	RESP_ITC_1242_00008257- RESP_ITC_1242_00008311
U.S. Patent No. 7,609,941 to Matsukawa	RESP_ITC_1242_00008312- RESP_ITC_1242_00008364
U.S. Patent No. 7,786,891 to Owens	RESP_ITC_1242_00008365- RESP_ITC_1242_00008383
U.S. Patent No. 7,952,609 to Simerly	RESP_ITC_1242_00008384- RESP_ITC_1242_00008409
U.S. Patent No. 7,956,739 to Hong	RESP_ITC_1242_00008410- RESP_ITC_1242_00008428
U.S. Patent No. 8,154,581 to Carter	RESP_ITC_1242_00007386- RESP_ITC_1242_00007409
U.S. Patent No. 8,164,614 to Carter	RESP_ITC_1242_00007410- RESP_ITC_1242_00007434
U.S. Patent No. 8,520,068 to Naidoo	RESP_ITC_1242_00004713- RESP_ITC_1242_00004735
U.S. Patent No. 8,619,136 to Howarter	RESP_ITC_1242_00008429-

Prior Art Reference	Bates Range
	RESP_ITC_1242_00008445
U.S. Patent No. 8,948,245 to Henson	RESP_ITC_1242_00008446- RESP_ITC_1242_00008519
U.S. Patent No. 9,250,267 to Jackson	RESP_ITC_1242_00006146- RESP_ITC_1242_00006161
U.S. Patent No. 9,300,921 to Naidoo	RESP_ITC_1242_00007647- RESP_ITC_1242_00007670
U.S. Patent No. 9,579,913 to Menard	RESP_ITC_1242_00007944- RESP_ITC_1242_00008016
Published U.S. App. 2002/0016971 to Berezowski	RESP_ITC_1242_00005283- RESP_ITC_1242_00005325
Published U.S. App. 2002/0030583 to Jang	RESP_ITC_1242_00001473- RESP_ITC_1242_00001479
Published U.S. App. 2002/0067259 to Fufidio	RESP_ITC_1242_00005326- RESP_ITC_1242_00005343
Published U.S. App. 2002/0071031 to Lord	RESP_ITC_1242_00006721- RESP_ITC_1242_00006728
Published U.S. App. 2002/0075307 to Alexander	RESP_ITC_1242_00001493- RESP_ITC_1242_00001520
Published U.S. App. 2002/0076049 to Boykin	RESP_ITC_1242_00006729- RESP_ITC_1242_00006741
Published U.S. App. 2002/0118283 to Guerrero	RESP_ITC_1242_00001541- RESP_ITC_1242_00001567
Published U.S. App. 2002/0147982 to Naidoo	RESP_ITC_1242_00001568- RESP_ITC_1242_00001591
Published U.S. App. 2003/0046557 to Miller	RESP_ITC_1242_00005344- RESP_ITC_1242_00005387
Published U.S. App. 2003/0061344 to Monroe	RESP_ITC_1242_00005451- RESP_ITC_1242_00005597
Published U.S. App. 2003/0062997 to Naidoo	RESP_ITC_1242_00006742- RESP_ITC_1242_00006764
Published U.S. App. 2003/0071724 to D'Amico	RESP_ITC_1242_00007443- RESP_ITC_1242_00007458
Published U.S. App. 2003/0075287 to Weik	RESP_ITC_1242_00005388- RESP_ITC_1242_00005405
Published U.S. App. 2003/0081747 to Ahlstrom	RESP_ITC_1242_00005406- RESP_ITC_1242_00005419
Published U.S. App. 2003/0095184 to Lin	RESP_ITC_1242_00001744- RESP_ITC_1242_00001749
Published U.S. App. 2003/0095185 to Naifeh	RESP_ITC_1242_00001750- RESP_ITC_1242_00001771
Published U.S. App. 2003/0103138 to Assayag	RESP_ITC_1242_00005420- RESP_ITC_1242_00005429
Published U.S. App. 2003/0122514 to Mercier	RESP_ITC_1242_00001772-

Prior Art Reference	Bates Range
	RESP_ITC_1242_00001780
U.S. Patent Publication. No. 2003/0117280 to Prehn	RESP_ITC_1242_00008173- RESP_ITC_1242_00008183
Published U.S. App. 2003/0171930 to Junqua	RESP_ITC_1242_00005430- RESP_ITC_1242_00005442
Published U.S. App. 2003/0206101 to Dixon	RESP_ITC_1242_00005443- RESP_ITC_1242_00005450
Published U.S. App. 2004/0003051 to Krzyanowski	RESP_ITC_1242_00005598- RESP_ITC_1242_00005622
Published U.S. App. 2004/0036603 to Bingham	RESP_ITC_1242_00006765- RESP_ITC_1242_00006780
Published U.S. App. 2004/0080615 to Klein	RESP_ITC_1242_00001858- RESP_ITC_1242_00001867
Published U.S. App. 2004/0080627 to Kroll	RESP_ITC_1242_00001868- RESP_ITC_1242_00001885
Published U.S. App. 2005/0001717 to Bohbot	RESP_ITC_1242_00002049- RESP_ITC_1242_00002067
Published U.S. App. 2005/0165612 to Van Rysselberghe	RESP_ITC_1242_00002127- RESP_ITC_1242_00002142
Published U.S. App. 2006/0095539 to Renkis	RESP_ITC_1242_00005630- RESP_ITC_1242_00005651
Published U.S. App. 2006/0171453 to Rohlfing	RESP_ITC_1242_00005652- RESP_ITC_1242_00005693
Published U.S. App. 2007/0162748 to Okayama	RESP_ITC_1242_00007792- RESP_ITC_1242_00007845
Published U.S. App. 2009/0224912 to Sobol	RESP_ITC_1242_00002862- RESP_ITC_1242_00002867
Published U.S. App. 2006/0255931 to Hartsfield	RESP_ITC_1242_00005694- RESP_ITC_1242_00005727
Published U.S. App. 2019/0058720 to Lindquist	RESP_ITC_1242_00007459- RESP_ITC_1242_00007473
U.S. Pat. Pub. No. 2005/0285934 to Carter	RESP_ITC_1242_00002160- RESP_ITC_1242_00002173
U.S. Pat. Pub. No. 2007/0103548 to Carter	RESP_ITC_1242_00005776- RESP_ITC_1242_00005800
U.S. Pat. Pub. No. 2008/0117299 to Carter	RESP_ITC_1242_00002809- RESP_ITC_1242_00002833
Canadian Patent No. 2228679 to Heggie	RESP_ITC_1242_00006698- RESP_ITC_1242_00006720
French Patent No. FR 2759804 to Bonsaglio	RESP_ITC_1242_00001331- RESP_ITC_1242_00001347
United Kingdom Patent Application No. GB2285365 to Yau	RESP_ITC_1242_00001348- RESP_ITC_1242_00001373
Japan Patent No. JPH 09-107409	RESP_ITC_1242_00007775-

Prior Art Reference	Bates Range
	RESP_ITC_1242_00007783
Korea Patent No. KR 100373449 to Son	RESP_ITC_1242_00001391- RESP_ITC_1242_00001408
Korea Patent No. KR 19980039422 to Sunghwa Kim Won-joon	RESP_ITC_1242_00001417- RESP_ITC_1242_00001421
Korea Patent No. KR 20010074212 to Shin	RESP_ITC_1242_00001422- RESP_ITC_1242_00001425
International Patent No. WO 99/06976 to Meyvis	RESP_ITC_1242_00006972- RESP_ITC_1242_00006995
International Patent No. WO 01/27763 to Simerly	RESP_ITC_1242_00006996- RESP_ITC_1242_00007042
International Patent No. WO 01/50731 to Noyman	RESP_ITC_1242_00005004- RESP_ITC_1242_00005038
International Patent No. WO 01/93220 to Menard	RESP_ITC_1242_00005039- RESP_ITC_1242_00005131
International Patent No. WO 01/097524 to Scaman	RESP_ITC_1242_00006454- RESP_ITC_1242_00006486
International Patent No. WO 02/005220 to Bennett	RESP_ITC_1242_00005132- RESP_ITC_1242_00005152
International Patent No. WO 02/065420 to Vojtech	RESP_ITC_1242_00006487- RESP_ITC_1242_00006509
International Patent No. WO 03/028375 to Hong	RESP_ITC_1242_00007043- RESP_ITC_1242_00007075
International Patent No. WO 2006/046234 to Segel	RESP_ITC_1242_00008520- RESP_ITC_1242_00008521
“Motion Activated Video Surveillance Using TI DSP,” Carnegie Mellon University, August 4-6, 1999, available at https://www.ti.com/sc/docs/general/dsp/fest99/avi/1paper.pdf .	RESP_ITC_1242_00005272- RESP_ITC_1242_00005277
“Video Surveillance Equipment Selection and Application Guide,” NIJ Guide 201-99, October 1999, available at https://www.ojp.gov/pdffiles1/nij/179545.pdf .	RESP_ITC_1242_00006162- RESP_ITC_1242_00006244
“Nanny-Cam May Leave a Home Exposed,” New York Times, April 14, 2002, available at https://www.nytimes.com/2002/04/14/business/nanny-cam-may-leave-a-home-exposed.html .	RESP_ITC_1242_00005278- RESP_ITC_1242_00005282
Duy Nguyen, “Mobile Home Security with GPRS”.	RESP_ITC_1242_00007784- RESP_ITC_1242_00007787
“Scalable Multimedia System for Interactive Surveillance and Video Communication Applications,” IEEE 10th European Signal Processing Conference, September 4-8, 2000, available at https://ieeexplore.ieee.org/document/7075784 .	RESP_ITC_1242_00007788- RESP_ITC_1242_00007791
X10 Wireless Technology, Inc.’s Xcam2, technical user manual, available at	RESP_ITC_1242_00007694- RESP_ITC_1242_00007695

Prior Art Reference	Bates Range
http://www.electronicoscaldas.com/datasheet/XCam2-WideEye_X10.pdf	
80211b_Video	RESP_ITC_1242_00007846- RESP_ITC_1242_00007871
Axis 2100 Network Camera Users Guide V.1.2	RESP_ITC_1242_00007872- RESP_ITC_1242_00007929
Axis Communication Press Release_Axis adds wireless capability to its video offerings	RESP_ITC_1242_00007930
[KX-HCM270] Panasonic Network Camera Operating Instructions	RESP_ITC_1242_00008035- RESP_ITC_1242_00008172

2. Prior Art Systems

Prior Art System	Knowledgeable Person(s)
Panasonic Network Cameras, including Model No. KX-HCM270	Panasonic
Axis Network Cameras, including Axis 2100	Axis

B. Anticipation and Obviousness

Respondents attach Exhibits G-1 to G-12, which provide exemplary disclosures showing how the prior art anticipates and/or renders obvious the asserted claims of the '638 patent. The charts identify primary references, and in some cases, secondary references and obviousness contentions. Respondents also identify secondary references and obviousness contentions in Exhibit G-13. Respondents may rely on any of the primary references identified in Exhibits G-1 to G-12 in combination with any secondary reference identified in those exhibits or in Exhibit G-13. Respondents' anticipation contentions are presented in the following exhibits, each of which describes anticipation of one or more claims of the '638 patent by a primary reference:

Exhibit	Primary Reference
G-1	U.S. Patent No. 6,185,294 ("Chornenky")
G-2	U.S. Patent No. 5,428,388 ("von Bauer")

G-3	U.S. Patent Pub. 2004/0080615 (“Klein”)
G-4	U.S. Patent No. 7,956,739 (“Hong”)
G-5	U.S. Patent No. 7,015,943 (“Chiang”)
G-6	U.S. Patent No. 8,619,136 (“Howarter”)
G-7	WO 01/93220 (“Menard”)
G-8	U.S. Patent No. 7,583,191 (“Zinser”)
G-9	Panasonic Network Camera Model No. KX-HCM270 (“Panasonic”)
G-10	Axis 2100 Network Camera (“Axis 2100”)
G-11	WO 02/05220 (“Bennett”)
G-12	U.S. Patent No. 4,524,384 (“Lefkowitz”)

Respondents’ obviousness contentions are also contained in Exhibits G-1 to G-12 and Exhibit G-13.

The U.S. Supreme Court in *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) emphasized that inventions arising from ordinary innovation, ordinary skill, or common sense should not be patentable. *Id.* at 1732, 1738, 1742–1743, 1746. A patent claim may be obvious if the combination of elements was obvious to try or if there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent’s claims. When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, Section 103 likely bars its patentability. *Id.* at 1740. The Court stated that courts should “look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.”

Id. at 1740–41. *KSR* does not mandate evidence of a motivation or suggestion to combine prior art references. *See TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 580–81 (E.D. Tex. 2007). “[A] court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ” to resolve the question of obviousness. *KSR*, 127 S. Ct. at 1741.

Based on all of these considerations, as further detailed in Exhibits G-1 to G-12 and Exhibit G-13, persons of ordinary skill in the art would have combined the teachings of the prior art references discussed and charted in those exhibits. The combinations of these references would have rendered obvious to one of ordinary skill in the art the subject matter of the asserted claims of the ’638 patent. The references identified in Exhibits G-1 to G-12 and Exhibit G-13 are analogous prior art to the subject matter of the asserted claims and, for at least the reasons set forth below, are properly combinable. Because these prior art references exist within a single field of art, particularly one in which individuals in the field often shared and/or collaborated on their work, it would have been obvious for a person of skill in the art to look from one piece of prior art to another in order to find any missing functionality they desired to implement. Therefore, these references provide interrelated teachings and one of ordinary skill would look to the concepts in any of these references when seeking to solve the problems purportedly addressed by the ’638 patent.

Numerous prior art references, including those identified in the attached exhibits, reflect common knowledge and the state of the prior art before the earliest claimed effective filing date of the ’638 patent. As it would be unduly burdensome to create detailed claim charts for all of the invalidating combinations, for at least the reasons described in these invalidity contentions, it would have been obvious to one of ordinary skill in the art to combine any of a number of prior art references, including any combination of those identified in the attached exhibits, to meet the

limitations of the asserted claims of the '638 patent. Respondents' inclusion of exemplary combinations, in view of the factors and motivations identified here, does not preclude Respondents from identifying other invalidating combinations and/or motivations as appropriate.

No showing of a specific motivation to combine prior art is required to combine the references disclosed above and in the attached charts, because each combination of art would have no unexpected results, and at most would simply represent a known alternative to one of ordinary skill in the art. *See KSR*, 127 S. Ct. at 1739–40 (rejecting the Federal Circuit's "rigid" application of the teaching, suggestion, or motivation to combine test, instead espousing an "expansive and flexible" approach). Indeed, the Supreme Court held that a person of ordinary skill in the art is "a person of ordinary creativity, not an automaton" and "in many cases a person of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at 1742. Nevertheless, in addition to the information contained herein, Respondents hereby identify additional motivations and reasons to combine the cited art.

One or more combinations of the prior art references identified herein would have been obvious because these references would have been combined using: known methods to yield predictable results; known techniques in the same way; a simple substitution of one known, equivalent element for another to obtain predictable results; and/or a teaching, suggestion, or motivation in the prior art generally. In addition, it would have been obvious to combine the prior art references identified above because there were only a finite number of predictable solutions and/or because known work in one field of endeavor prompts variations based on predictable design incentives and/or market forces either in the same field or a different one. In addition, the combinations of the prior art references identified above would have been obvious because the combinations represent the known potential options with a reasonable expectation of success.

Additional evidence that there would have been a motivation or reason to combine the prior art references identified above includes the interrelated teachings of multiple prior art references; the effects of demands known to the design community or present in the marketplace; the existence of a known problem for which there was an obvious solution; the existence of a known need or problem in the field of endeavor at the time of the invention; and the background knowledge that would have been possessed by a person having ordinary skill in the art. For example, the prior art references are generally directed to the same problems. Thus, a skilled artisan seeking to solve these problems would look to these cited references in combination.

Thus, the motivation or reason to combine the teachings of the prior art references disclosed herein is found in the references themselves and in: (1) the nature of the problems being solved; (2) the express, implied, and inherent teachings of the prior art; (3) the knowledge of persons of ordinary skill in the art; (4) the fact that the prior art is generally directed towards the same problems; and/or (5) the predictable results obtained in combining the different elements of the prior art; (6) the use of a known technique to improve similar devices, methods, or products in the same way; (7) the predictable results obtained in applying a known technique to a known device, method, or product ready for improvement; (8) the finite number of identified predictable solutions that had a reasonable expectation of success; and (9) known work in various technological fields that could be applied to the same or different technological fields based on design incentives or other market forces.

In addition, it would have obvious to combine any of the prior art in Exhibits G-1 to G-12 and Exhibit G-13 because all of these references relate to devices and methods relating to networked video transmission and home automation in routine and predictable ways.

Respondents incorporate by reference prior art from the prosecution histories and background sections of the '638 patent. Respondents expect to rely on the testimony of one or more expert witnesses and documents referenced by those expert witnesses in support of these contentions and incorporate those forthcoming expert reports as if fully set forth herein.

Respondents contend that there are no secondary considerations of non-obviousness evidencing the validity of any of the asserted claims. Secondary considerations of non-obviousness, also referred to as objective indicia of non-obviousness, “can include copying, long felt but unsolved need, failure of others, commercial success, unexpected results created by the claimed invention, unexpected properties of the claimed invention, licenses showing industry respect for the invention, awards or other industry praise for the invention, and skepticism of skilled artisans before the invention.” *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1368 (Fed. Cir. 2013). “A nexus between the merits of the claimed invention and evidence of secondary considerations is required in order for the evidence to be given substantial weight in an obviousness decision.” *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 668 (Fed. Cir. 2000). Moreover, even if a nexus exists, secondary considerations of non-obviousness “simply cannot overcome [a] strong prima facie showing of obviousness.” *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1368 (Fed. Cir. 2008). Complainants have not established the existence of any objective indicia of non-obviousness or secondary considerations. Respondents reserve the right to supplement their contentions to respond to any such evidence should Complainants be permitted to raise them in the future. While discovery in this case is ongoing, and Respondents’ investigation continues (which will include expert discovery), to the extent Complainants contend that one or more asserted claims is not obvious based on secondary considerations recognized by relevant authority Respondents contend such

allegations are without merit. For example, Complainants have provided no evidence of copying of the purported inventions of the asserted claims.

Complainants also have not identified any evidence that the purported inventions of the asserted claims have enjoyed any commercial success. Similarly, Complainants have provided no evidence of any failure of others to realize any purported inventions of the asserted claims, or any evidence of any long felt but unsolved need solved by the purported inventions of the asserted claims. To the contrary, the relative novelty and widespread availability of video doorbell technology is contrary evidence of any long-felt need for the purported inventions of the asserted claims.

C. Other Invalidity Grounds

Respondents hereby identify grounds of invalidity based on (1) lack of written description under 35 U.S.C. § 112(a); (2) lack of enablement under 35 U.S.C. § 112(a); and (3) indefiniteness under 35 U.S.C. § 112 (b). These contentions shall not be construed as an admission that any claim construction advanced by Respondents in this case is in any way inconsistent, flawed, or erroneous. Nor should these contentions prevent Respondents from advancing claim construction and/or non-infringement positions in lieu of, or in addition to, invalidity positions. Further, these contentions shall not be construed as an admission of or acquiescence to Complainants' purported construction of the claim language or of other positions advanced by Complainants during the course of this litigation. Respondents' Invalidity Contentions under 35 U.S.C. § 112 may depend, in part, on the Court's claim construction, as well as Complainants' alleged scope of the asserted claims of the '638 patent. Consequently, Respondents only identify the issues under 35 U.S.C. § 112 of which they are presently aware.

1. Enablement and/or Written Description Pursuant to 35 U.S.C. § 112(a)

The '638 patent does not provide sufficient written description to establish that the alleged inventors were in possession of the alleged inventions recited in certain of the asserted claims of the '638 patent at the time the '638 patent was filed. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). In other words, the applicants did not describe their purported inventions in a manner that “reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* The specification of the '638 patent also does not enable one of ordinary skill in the art to make and/or use certain recited elements of the asserted claims of the '638 patent without undue experimentation.

To the extent the following limitations are definite (under 35 U.S.C. § 112, second paragraph), the '638 patent fails to sufficiently describe or enable them as required by 35 U.S.C. § 112, first paragraph: “receive and display an alert transmitted wirelessly from the exterior device”; “an exterior device located proximate a door comprising a camera, a microphone, a speaker, an RF receiver, an RF transmitter, a proximity detector, and a keypad comprising one or more buttons operable to wirelessly transmit streaming video data after the keypad is pressed by a person at the door”; “a computer configured for wireless communication with the exterior device to receive digital video data”; and “at least one.” Respondents also incorporate by reference Section XIII below.

2. Indefiniteness Pursuant to 35 U.S.C. § 112(b)

Several of the asserted claims of the '638 patent are invalid because they fail to inform those skilled in the art about the scope of the alleged invention with reasonable certainty and are indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter the applicants regard as their alleged invention.

Certain asserted claims of the '638 patent are invalid as indefinite due to the following limitations which fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention: “wherein each of said at least one peripheral device is associated with a respective user .”

Moreover, claim 6 of the '638 patent is invalid because it covers both a system and a method. The final element of claim 6, an apparatus claim, recites “and wherein said at least one peripheral device comprises a cellular phone and is configured to display the video transmitted wirelessly by the camera, receive a message from the person transmitted wirelessly by the camera, receive and display an alert transmitted wirelessly from the exterior device after pressing of the keypad by the person to the user, and speaking with the person at the door using the software application running on the cellular phone.” At least the phrases “after pressing of the keypad by the person to the user” and “speaking with the person at the door” show that a user is required to perform an action. The claim therefore requires an apparatus and a “person” to perform the method step of pressing press the keypad and a “user” to perform the method step of speaking with the person.

XII. THE ASSERTED CLAIMS ARE UNPATENTABLE SUBJECT MATTER AND ARE INVALID UNDER 35 U.S.C. § 101

The asserted claims are invalid under 35 U.S.C. § 101, which provides that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore.” The asserted claims are invalid because: (1) as a whole, each asserted claim is directed to an abstract idea, which is subject matter excluded from the patentability requirements of § 101; and (2) the asserted claims lack an inventive concept in the application of the abstract ideas to which the asserted claims are

directed. See *Chamberlain Grp., Inc. v. Techtronic Indus. Co.*, 935 F.3d 1341, 1346–48 (Fed. Cir. 2019).

A. Legal Standard

The Supreme “Court has long held that ... laws of nature, natural phenomena, and abstract ideas” are not patentable.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (citation omitted). “The ‘abstract ideas’ category embodies the longstanding rule that ‘[a]n idea of itself is not patentable.’” *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 218 (2014) (alteration in original, citation omitted). A two-step framework applies to determine whether claimed subject matter is patent eligible. *Id.* First, the ALJ “determine[s] whether the claims at issue are directed to a patent-ineligible concept,” such as an abstract idea. *Id.* “The ‘abstract idea’ step of the inquiry calls upon [the ALJ] to look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016). “While the § 101 inquiry must focus on the language of the asserted claims themselves, the specification may nonetheless be useful in illuminating whether the claims are directed to the identified abstract idea.” *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 767 (Fed. Cir. 2019) (citation omitted).

Second, if the claims are directed to a patent-ineligible concept, the ALJ “examine[s] the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 218 (citation omitted). “[T]o transform an unpatentable [abstract idea] into a patent-eligible application of such a[n idea], one must do more than simply state the [abstract idea] while adding the words ‘apply it.’” *Mayo*, 566 U.S. at 72 (emphasis in original). “[T]he claim must include

‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’ *ChargePoint*, 920 F.3d at 773 (alterations in original) (quoting *Alice*, 573 U.S. at 221). The appropriate questions in this step two analysis are thus (i) “whether each of ‘the [elements] in the claimed [product] (apart from the [abstract idea itself]) involve well-understood, routine, conventional activity previously engaged in by researchers in the field,” and (ii) “whether all of the steps ‘as an ordered combination add[] nothing to the [abstract idea] that is not already present when the steps are considered separately.” *Chamberlain*, 935 F.3d at 1346–48 (emphasis in original) (quoting *Mayo*, 566 U.S. at 79). In other words, “adding novel or non-routine components is not necessarily enough to survive a § 101 challenge.” *Id.* Rather, the inventive concept must be “sufficient to ensure that the patent in practice amounts to significantly more” than a patent on the abstract idea. *See Mayo*, 566 U.S. at 72–73.

B. Application of Step One to the Asserted Claims

The asserted claims are directed to the abstract idea of monitoring data at a location, transmitting the data, and retrieving the data at another location. *See Chamberlain*, 935 F.3d at 1346 (claim reciting that “the wireless status condition data transmitter transmits a status condition signal that: corresponds to a present operational status condition defined, at least in part, by at least two operating states” directed to the abstract idea of “wirelessly communicating status information about a system”); *DIRECTV*, 838 F.3d at 1258 (claims reciting the function of wirelessly communicating regional broadcast content to an out-of-region recipient were directed to the abstract idea of “providing out-of-region access to regional broadcast content”); *Affinity Labs of Texas, LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1269 (Fed. Cir. 2016) (claims reciting media systems that deliver streaming content to a handheld wireless electronic device were directed to the abstract idea of “delivering user-selected media content to portable devices”). Moreover, “[t]he

asserted claims here are not limited to a specific implementation of a technological improvement to communication systems.” *See Chamberlain*, 935 F.3d at 1347. Each of these acts, monitoring, transmitting, and retrieving, were already “basic, conventional form[s]” of using data, and neither the specification nor the claims recite any improvement to these well-known uses of information. *See id.* Rather, they simply recite a system that monitors data at a location, transmits the data, and retrieves the data at another location, as explained in more detail below. *See id.*

For example, claim 9 of the ’478 patent recites a “wireless device ... operable to wirelessly transmit real-time digital streaming video” (transmitting), “a computer configured for wireless communication with the wireless device to receive digital real-time digital streaming video data” (retrieving), “wherein said computer is configured for communication of at least one peripheral device[] to transmit the digital real-time video data to at least one peripheral device” (transmitting); and “a software application running on at least one peripheral device” (retrieving). ’478 patent, cl. 9. Dependent claim 10 recites “video data from the wireless device is received by the computer upon actuation of a sensor” (monitoring, transmitting, retrieving) and “a graphical user interface is provided through which video data from the wireless device is accessible by each respective user using at least one peripheral device” (retrieving”). *Id.* cl. 10. Claim 11 recites “a proximity sensor located within the wireless device for detecting the presence of a person” (monitoring). *Id.* cl. 11.

Claim 6 of the ’638 patent recites “an exterior device ... operable to transmit streaming video data after the keypad is pressed by a person at the door” (monitoring, transmitting); “a computer configured for wireless communication with the exterior device to receive digital video data” (retrieving); “wherein said computer is configured for communication with [a] peripheral device to transmit the digital video data to said at least one peripheral device,” (transmitting); “a

software application running on at least one peripheral device,” and the “peripheral device ... is configured to display the video transmitted wirelessly by the camera, receive a message from the person transmitted by the camera, receive and display an alert transmitted wirelessly from the exterior device[,] and speaking with the person at the door using the software application running on the cellular phone,” i.e., the peripheral device (monitoring, transmitting, and retrieving). ’638 patent, cl. 6.

Claim 3 of the ’796 patent recites an “exterior module comprising [] a video camera that captures video of the person[,] a proximity sensor for detecting the person[, a] microphone that receives audio from the person,” (monitoring); the exterior module also comprises “an RF transmitter that transmits, to the software application, digital streaming video[,] an RF receiver that receives audio from the peripheral device[,] and a speaker that outputs the audio received by the RF receiver” (transmitting and retrieving). Claim 3 further recites and a “software application that provides a graphical user interface to a remote peripheral device, which is a cell phone,” and “is capable of [] displaying streaming video[,] playing audio captured by the exterior device[,] receiving audio to be sent to the exterior device[,] receiving a message that [a] person has been detected at the entrance[,] and displaying a notification that the person has been detected at the entrance”; and a “graphical user interface [that] displays one or more icons when the person is detected by the exterior device” (monitoring, transmitting, and retrieving).

Claim 6 of the ’797 patent claims an exterior device “capable of wireless transmitting digital streaming video” and “digital audio” “at least partially via the Internet, to a peripheral device, which is a cell phone, upon detection of a person ... by the motion detector” (monitoring and transmitting); and the exterior device also “is capable of receiving [and playing] the digital audio receiv[ed] from the peripheral device” (retrieving). ’797 patent, cl. 6. Claim 8 further claims

“the exterior device is capable of receiving one or more instructions to modify one or more control settings for operation of the camera” (retrieving); “the system is capable of displaying an icon that, upon selection, enables a user to speak with the person at the entrance” (transmitting); and “at least a portion of the digital streaming video is displayed at the same time the icon is displayed on the peripheral device” (retrieving). *Id.* cl. 8. Claim 9 of the ’797 patent claims “recording video using the exterior device” (monitoring); “wirelessly transmitting the recorded video and digital audio from the exterior device to a peripheral device at least partially via the Internet upon detection of the person” (transmitting); “receiving” and “playing” “the digital audio at the exterior device” (monitoring); “receiving an indication that one or more of the buttons of the keypad has been pressed” (retrieving); “displaying an icon on the peripheral device” and “upon selection of the icon, viewing the digital streaming video from the exterior device”; and “receiving a message from” and “sending a message to the exterior device” (retrieving and transmitting). *Id.* cl. 9.

Claim 9 of the ’660 patent claims an exterior device “capable of wirelessly transmitting digital streaming video” and “digital audio” (transmitting); “capable of receiving” and “playing digital audio received from the peripheral device through the speaker after a person associated with the entrance has been detected” (monitoring, transmitting, and retrieving); and “capable of receiving a request to change a sensitivity of the motion detector” and “modifying [that] sensitivity” (retrieving). ’660 patent, cl. 9. Claim 13 of the ’660 patent claims “wirelessly transmitting streaming video from an interior device upon detection of a person” and “transmitting digital audio using the interior device” (monitoring and transmitting); “receiving audio at the interior device that was captured by a peripheral device ... after the person has been detected by the interior device” (monitoring, transmitting, retrieving); and “displaying an icon and the streaming video at the same time on the peripheral device” (retrieving). *Id.* cl. 13. Claim 14

further claims “receiving one or more instructions at the interior device to modify two or more control settings for operations of the camera” and “the icon, when selected, allows a user to speak to the person” (retrieving). *Id.* cl. 14. Claim 16 further claims “receiving one or more instructions at the interior device to modify two or more control settings for operations of the camera” and “receiving an instruction to modify a sensitivity of the motion sensor” (transmitting and retrieving). *Id.* cl. 16.

Claim 9 of the '906 patent claims an exterior device “capable of wirelessly transmitting digital streaming video” and “digital audio” (transmitting); “capable of receiving the digital audio from a peripheral device” and playing that audio “through the speaker” (retrieving); “capable of receiving a request to change the sensitivity of the motion detector” and then “modifying the sensitivity” (retrieving); and “a software application that is used with the peripheral device that is operable to display one or more icons when the digital streaming video is playing in real time, allow a user to modify a threshold of the motion detector; and play audio from the exterior device” (retrieving and transmitting) '906 patent at cl. 9. Claim 13 of the '906 patent claims “transmitting digital streaming video” and “digital audio” “from a device upon detection of a person” (monitoring and transmitting); “receiving the digital audio at the device that was captured by a software application used by a peripheral device”; and “notifying a user that a predetermined condition has occurred” (transmitting and retrieving). *Id.* cl. 13.

Claim 1 of the '120 patent claims a device “capable of wirelessly transmitting digital streaming video to a peripheral device ... upon detection of a person by the motion sensor” (monitoring and transmitting) and “a software application capable of operating on a smartphone, wherein the software application is capable of (a) displaying the digital streaming video and at the

same time displaying at least one icon; (b) displaying recorded video; and (c) modifying one or more control parameters associated with the device” (retrieving). ’120 patent, cl. 1.

The specification confirms that the claims are directed to the abstract idea of monitoring data at a location, transmitting the data, and retrieving the data at another location. For example, the specification states that “[t]here are numerous problems presently associated with receiving visitors at a home or office,” including when the resident “is absent, there is often no message for the visitors, no means to leave an interactive message for the resident, and no means to ensure that unwanted access is not obtained.” ’120 patent at 1:56–62. In addition “answering the call of someone at the door ... can present certain security risks to an occupant therein,” if either the *Id.* at 1:62–2:4. In other words, the “problem” the claimed invention is intended to solve is a lack of monitoring data at a location, a lack of transmitting that data, and a lack of retrieving that data. See ’120 patent at 1:56–2:17.

The specification purports to address this problem by monitoring information at a location (e.g., “a proximity sensor for detecting a person at the entrance, a video camera for recording an image of the person at the entrance, a microphone for recording sound of the person at the entrance”), transmitting information (e.g., “a transmitter for communicating sounds and images of the person at the entrance”), and retrieving information (e.g., “a receiver for receiving communications at the wireless exterior module”). ’120 patent at 2:32–39; *see also id.* at 2:45–52 (“the software application includes a graphic user interface that enables a user to view images from the video camera communicated from the wireless exterior module. The remote peripheral device is configured to electronically communicate with the computerized controller for viewing an image from the video camera communicated from the wireless exterior module.”), 3:39–53, 3:56–62, 4:23–32, 4:52–62. The location for monitoring information can also be the location of the

occupant, and the information can also be transmitted from that location and retrieved at the entrance (e.g., “a speaker for playing audio to the person at the entrance” and “a receiver for receiving communications at the wireless exterior module.”). *Id.*; *see also id.* at 2:43–45 (“The computerized controller configured to control recording of communications with the wireless exterior module and playback of such recording”), 3:53–55, 3:63–4:6, 4:7–10, 5:3–6.

The specification does not include new and improved techniques for transmitting information and instead simply recites transmitting information “wirelessly,” using the “Internet” or a “satellite.” ’120 patent at 3:25–26, 4:23–26, 4:37–39, 4:52–56; *see also* Provisional Application at 13–14 (communication could be based on ISDN, modem, LAN, RF, or the Internet). Nor does the specification disclose new and improved techniques for monitoring and retrieving data, broadly referencing “detecting,” “recording,” and “receiving,” for example, without specifying the manner in which they are performed. ’120 patent at 2:32–39 (“a proximity sensor for detecting a person at the entrance, a video camera for recording an image of the person at the entrance, a microphone for recording sound of the person at the entrance” and “a receiver for receiving communications at the wireless exterior module”); *see also id.* at 3:39–64, 4:18–32, 4:33–44.

In addition, the Provisional Application, to which Complainants claim priority for claim 6 of the ’797 patent, claim 13 of the ’906 patent, claim 1 of the ’120 patent, claims 9, 10, and 11 of the ’478 patent, and claim 6 of the ’638 patent, further confirms that the asserted claims are drawn to the abstract idea of monitoring, transmitting, and retrieving data:

- “None of these intercom-type devices, however, has stored messaging features that make them useful when the resident is away from home or unavailable. Moreover, none of these systems have communication capabilities with remote devices.” Provisional App. at 2:3–5

- “The system fails to provide a user with the option of communicating through a variety of peripheral devices.” *Id.* at 4:12–13.
- “There remains a need, therefore, for a self-contained door communication and messaging device that has simple and intuitive interactivity with the visitor, that has messaging capability permitting incoming and outgoing messages to be easily recorded and played, that permits the resident to screen visitors, that permits the resident to speak with visitors without opening the door, that does not interrupt or get interrupted by the use of a telephone or telephone answering machine, control, that provides a means for storing digital images, that provides enhanced security features, and that is inexpensive and easy to install.” *Id.* at 4:17–5:2.
- “To attain this, the present inventions includes a system generally comprising an exterior voice and messaging terminal; an exterior video monitoring terminal; an interior terminal; a control computer; a communication link between the control computer and the exterior and interior terminals a remote peripheral device(s), and a communication link between the control computer and the remote devices.” *Id.* at 6:4–8.
- “A further object of the present invention is to provide an improved door answering system which provides the option of having a visitor converse with an inhabitant, leave a message, or call a remote device for communication with the owner of the building. A still further object of the present invention is to provide an improved door answering system which sensing an approaching object and digitally records the same for later viewing.” *Id.* at 9:4–8.

C. Application of Step Two to the Asserted Claims

The asserted claims lack an inventive concept because they “simply recite[] the use of generic features of [wireless devices], as well as routine functions[,] to implement the underlying idea. That is not enough.” *DIRECTV*, 838 F.3d at 1262. As explained below, “the specification makes clear that transmitting information wirelessly was conventional at the time the patent was filed and could be performed with off-the-shelf technology.” *Chamberlain*, 935 F.3d at 1349. Indeed, the features and functions of the asserted claims are so generic and routine that the asserted patents simply state “have this feature” or “have this function” without explaining how to obtain the feature or achieve the function. As a result, the asserted claims do not transform the abstract idea into a patentable inventive concept. *See Chamberlain*, 935 F.3d at 1346 (no inventive concept where “transmitting information wirelessly was conventional at the time the patent was filed and

could be performed with off-the-shelf technology); *DIRECTV*, 838 F.3d at 1262 (no inventive concept where “[t]he claim simply recites the use of generic features of cellular telephones, such as a storage medium and a graphical user interface, as well as routine functions, such as transmitting and receiving signals, to implement the underlying idea); *Affinity Labs*, 838 F.3d at 1271 (“The features set forth in the claims are described and claimed generically rather than with the specificity necessary to show how those components provide a concrete solution to the problem addressed by the patent.”).

First, “each of ‘the [elements] in the claimed [product] (apart from the [abstract idea itself]) involve well-understood, routine, conventional activity previously engaged in by researchers in the field.” *Chamberlain*, 935 F.3d at 1346–48 (emphasis in original) (quoting *Mayo*, 566 U.S. at 79). The elements of the asserted claims involve nothing more than off-the-shelf components that existed prior to December 29, 2006 and the filing of the Provisional Application.

Wireless Audio and Video Cameras: Each of the asserted claims recites a device capable of wireless video and audio transmission. The specification confirms that such a device is not inventive, stating that “[a] suitable wireless digital camera that has weather resistance is the camera currently sold in the United States by Panasonic under the part number BB-HCM-371” (“Panasonic camera”). ’120 patent at 16:22–25. The Panasonic camera is an off-the-shelf monitoring system. Both the Panasonic camera referenced in the claims, and an earlier Panasonic camera that predates the Provisional Application disclose nearly all the limitations of the asserted claims. See Charts for Panasonic Network Camera Operating Instructions Model No. KX-HCM270 (“Panasonic 270”); see also BB-HCM-371 Operating Instructions (disclosing a detection and viewing system with wireless transmission and encryption capabilities comprising a camera, a motion sensor, an outer housing, an antenna, and a software application capable of streaming

video, displaying video, modifying control parameters, and storing video); U.S. Patent 6,385,772 (“Courtney”) at 4:1-13, 18-27.

Peripheral Devices: Claims 3 and 7 of the ’796 patent, Claims 13, 14, 16, and 18 of the ’660 patent, Claim 18 of the ’906 patent, Claims 6 and 8 of the ’797 patent, Claims 9, 10, 11, and 17 of the ’478 patent, Claim 1 of the ’120 patent, and Claim 6 of the ’638 patent recite a peripheral device that is either a cell phone or a smartphone. The peripheral devices are likewise off-the-shelf cell phones or smartphones, which were available for purchase prior to the filing of the Provisional Application and December 29, 2006, and were capable of wireless and audio communication. See ’120 patent at 3:5–9 (“In yet another feature, the remote peripheral device comprises a cell phone. In still yet another feature, the remote peripheral device comprises a video phone. In further features, the remote peripheral device comprises a computer and a personal digital assistant.”), 5:6-8; International Publication No. WO 01/93220 to Raymond J. Menard, entitled “Modular communication and control system and method,” filed on May 29, 2001, and claiming priority to US57991300A (“Menard”) at 4:27-32, 17:3-11, 19:9-29; *see also* Charts for Menard.

Each of the asserted claims in the ’796, ’906, ’478, ’120, and ’638 patents further recite a system having a software application capable of displaying streaming video; playing audio captured by the exterior device; receiving audio to be sent to the exterior device; receiving a message that the person has been detected at the entrance; or displaying a notification that the person has been detected at the entrance. Such software apps existed prior to December 29, 2006 and the filing date of the Provisional Application. See, *e.g.*, Menard at 4:27-32, 19:9-29; Charts for Menard; Panasonic 270 at pp. 8, 31-38, 42, 44-45, 50-52, 55-56, 97, 119-20, 126; Menard at 11:26-27, 19:18-22, 31:17-31, 32:4-8; Charts for Panasonic 270.

Computers: Claim 9 of the '478 patent and Claim 6 of the '638 patent recite a “computer configured for wireless communication” with the video-recording device and the peripheral device. Claim 17 of the '478 patent further states that the computer is a server. The specification states that the computer is “personal computer.” '478 patent at 2:65–67; 7:5–24. The specification merely recites various capabilities that personal computers possess, and does not describe any special or improved functionality in this “personal computer,” nor does the specification describe how to make such a personal computer. *See id.* at 2:65–67; 7:5–63; Panasonic 270 at pp. 10, 19–38, 43–44, 51, 60, 91–93, 98, 122–28; Charts for Panasonic 270; Menard at 11:26–27, 19:18–22, 31:17–31, 32:4–8; Charts for Menard. Similarly, the specification calls the computer a “server” in a single instance, and does not disclose any new or improved functionality such a server would possess. *See id.* at 17:5–7, Fig. 10.

Storing data: Claim 3 of the '796 recites capturing video and receiving audio; claim 9 of the '797 patent recites storing a message address; claim 6 of the '638 patent recites receiving data; claim 1 of the '120 patent recites storing streaming video, and claims 13 and 18 of the '906 patent, 13 and 18 of the '660 patent recites storing streaming video and digital audio. The specification of the '660 patent merely references storage existing in personal computers, but does not describe how to store the video and audio data. *See* '660 patent at 1:39–41, 49–55, 4:42–46.

Second, “all of the steps ‘*as an ordered combination* add[] nothing to the [abstract idea] that is not already present when the steps are considered separately.” *Chamberlain*, 935 F.3d at 1346–48 (emphasis in original) (quoting *Mayo*, 566 U.S. at 79). Rather, “[t]he claim[s] simply recite[] the use of generic features of [computers, wireless cameras, and] cellular telephones, such as a storage medium and a graphical user interface, as well as routine functions, such as transmitting and receiving signals, to implement the underlying idea.” *DIRECTV*, 838 F.3d at

1262; *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (“considered individually or taken together as an ordered combination,” the claimed elements were well understood “computer functions” and those broad functions did little to limit the claims scope). As a result, the asserted claims are unpatentable for failing to claim patentable subject matter under § 101.

XIII. THE ASSERTED CLAIMS ARE INVALID UNDER 35 U.S.C. § 112

The asserted claims are invalid because the specification does not provide sufficient disclosure to establish to a person of ordinary skill in the art that the inventors possessed an invention as broadly as claimed. As a result, these claims are invalid for lack of written description. *See e.g. Ariad v. Lilly*, 598 F.3d 1336 (Fed. Cir. 2010) (en banc); *In the Matter of Certain Elec. Digital Media Devices & Components Thereof Comm'n Opinion*, USITC Inv. No. 337-TA-796 (Sept. 6, 2013) (affirming ALJ findings with respect to section 112 where there was an inadequate disclosure of a “high impedance” path in the specification and there was no explanation of the bounds).

The written description requirement contained in 35 U.S.C. § 112, ¶ 1 requires that the specification “clearly allow persons of ordinary skill in the art to recognize that the inventor invented what is claimed.” *Ariad*, 598 F.3d at 1351 (internal citations omitted). “In other words, the test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.*

The following asserted claims include a limitation related to a device having “a keypad having one or more buttons.” *See* ’797 patent cl. 6 (“an exterior device comprising: a camera; a microphone; a speaker; a motion detector; and a keypad having one or more buttons”); *id.* cl. 9

(“recording video using the exterior device, which comprises a digital camera, a microphone, a speaker, a transceiver, a keypad having one or more buttons . . . pressing of the one or more buttons of the keypad . . . receiving an indication that the one or more buttons of the keypad have been pressed”); ’478 patent cl. 9 (“a wireless device comprising a video camera, a speaker, a microphone, and a keypad having one or more buttons”); ’638 patent cl. 6 (“an exterior device located proximate a door comprising a camera, a microphone, a speaker, an RF receiver, an RF transmitter, a proximity detector, and a keypad comprising one or more buttons operable to wirelessly transmit streaming video data after the keypad is pressed by a person at the door”).

The specification, however, does not describe or define a “keypad” having one button. Rather, the specification references “a keypad comprising a touch screen or a keyboard,” which comprises more than one button. ’797 patent at Fig. 2, Fig. 3, 3:12–15, 8:52–60, 9:32–37, 11:7–10, 11:16–20. Although “a claim need not be limited to a preferred embodiment[,] in a given case, the scope of the right to exclude may be limited by a narrow disclosure.” *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1479 (Fed. Cir. 1998). Similar to *Gentry Gallery*, where the specification “clearly identifie[d] the console as the only possible location for the controls,” the specification of the asserted patents clearly identifies the keypad as having more than one button. *See id.* The purpose of the keypad is to allow different combinations to be entered, which requires there be more than one button. *See* ’797 patent at Figs. 2 & 3 (devices including multiple buttons) Fig. 4 (“Hello, please use the module and tell us who you wish to visit. Use the keypad to enter your answer[.] The entered number is transmitt[ed] from the DVMS to the database application, where the application confirms that the number corresponds to an occupant “y,” who is officially present. . . . The application keeps track of the number of times a wrong number I entered. . . . If no one corresponds to the number, the visitor is prompted to select, by pressing a number on the

keypad designating who they wish to visit.”); Fig. 5 (“the visitor, using the DVMS keypad, enters the correct door lock code (e.g., 4321#”); *see also* 11:7–21. As a result, having only a single button on the “device” “is outside the stated purpose of the invention.” *See Gentry Gallery*, 134 F.3d at 1379; *see also Rivera v. Int’l Trade Comm’n*, 857 F.3d 1315, 1320 (Fed. Cir. 2017) (no written description where “[t]here is no hint or discussion of a cartridge or pod adaptor assembly or receptacle that also serves as the ‘pod.’ Instead, the specification explains how the cartridge may be adapted to accept a separate ‘pod’ to be used inside the cartridge.”); *Atl. Rsch. Mktg. Sys., Inc. v. Troy*, 659 F.3d 1345, 1354 (Fed. Cir. 2011) (claims that required single attachment point to gun invalid for lack of written description where specification only disclosed two attachment points); *PIN/NIP, Inc. v. Platte Chem. Co.*, 304 F.3d 1235, 1247–48 (Fed. Cir. 2002) (claims invalid for lack of written description where “nothing in the specification indicates that the invention is anything other than a *mixture* of two chemicals” but claims “encompass[ed] *separate* applications of the ingredients to tubers”). As a result, these claims are invalid for lack of written description support. *Ariad Pharms.*, 598 F.3d at 1358; *University of Rochester*, 358 F.3d at 927–28.

The following asserted claims include a limitation related to associating a user with a peripheral device: ’796 patent cls. 3, 7; ’660 patent cls. 9, 13; ’906 patent cls. 9, 13; ’797 patent cls. 6, 8, 9; ’478 patent cls. 9, 10; ’120 patent cl. 1; ’638 patent cl. 6.

The specification, however, does not describe associating a user with a peripheral device. At most, the specification refers to a “user” of a peripheral device, but nowhere describes how such a user would be associated with the device. ’797 patent at 4:40–43 (“a graphic user interface to a remote peripheral device by which a user of the remote peripheral device may view the video of the person at the entrance”); *id.* at 4:56–59 (“wherein the graphic user interface provided to the remote peripheral device further enables a user of the remote peripheral device to hear the audio

of the person at the entrance”); *id.* at 3:65–4:1, 4:63–66 (“the method further comprises determining by a user with the remote peripheral device, the recorded greeting that is played through a graphical user interface”). As a result, these claims are invalid for lack of written description. See *Infinity Computer Prod., Inc. v. Oki Data Americas, Inc.*, 987 F.3d 1053 (Fed. Cir. 2021) (affirming that the terms “passive link” and “computer” were indefinite in patents involving use of fax machine as printer or scanner for personal computer, and thus holding that the patents were invalid); *Transperfect Glob., Inc. v. Matal*, 703 F. App’x 953, 963 (Fed. Cir. 2017) (claims directed to “said hyperlink” referring to “one or more untranslated further electronic communications” was invalid for lack of written description where “specification provides no disclosure of how a browser plug-in would redirect a user to a translated version of an untranslated hyperlinked webpage, or to the translation manager, each time an untranslated hyperlink is activated” and “[t]he only disclosed mechanism for translating hyperlinked pages uses the translation manager to replace the hyperlinks in the original webpage with new hyperlinks in a translated webpage that point to the translation manager.”); *Realtime Data, LLC v. Morgan Stanley*, 554 F. App’x 923, 936–37 (Fed. Cir. 2014) (claims directed to “content dependent data compression” invalid for lack of written description where the patents did not disclose “disclose decompression whereby an analysis of the content of an encoded block is used to determine the decoders for purposes of decompression” and term appeared only in the claims, “which contain limited language and no descriptive content and hence fail to show that [the patentee] invented or had possession of content-based or content-dependent data decompression”).

Dated: April 23, 2021

Respectfully submitted,

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**UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.**

**Before the Honorable Clark S. Cheney
Administrative Law Judge**

In the Matter of

**CERTAIN IP CAMERA SYSTEMS
INCLUDING VIDEO DOORBELLS AND
COMPONENTS THEREOF**

Inv. No. 337-TA-1242

I, Debby Brady, hereby certify that on April 23, 2021, a copy of *Respondents' Disclosure of Invalidity Contentions* was served on the following as indicated:

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