

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO**

Civil Action No. 1:19-cv-00438-CMA-MEH

CELLECT, LLC,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD., and
SAMSUNG ELECTRONICS AMERICA, INC.,

Defendants.

SAMSUNG’S INVALIDITY CONTENTIONS

Pursuant to Local patent Rules 8 and 9, the Scheduling Order (Dkt. No. 27), and Minute Order (Dkt. No. 55), Defendants Samsung Electronics Co. Ltd., and Samsung Electronics America Inc. (collectively “Defendants” or “Samsung”) hereby serve their Invalidity Contentions to Plaintiff Collect, LLC. (“Plaintiff” or “Collect”) regarding U.S. patent Nos. 6,043,839 (“the ’839 patent”); 6,275,255 (“the ’255 patent”); 6,424,369 (“the ’369 patent”); 6,452,626 (“the ’626 patent”); 6,862,036 (“the ’036 patent”); 6,982,740 (“the ’740 patent”); 6,982,742 (“the ’742 patent”); 7,002,621 (“the ’621 patent”); 9,186,052 (“the ’052 patent”); 9,198,565 (“the ’565 patent”); and 9,667,896 (“the ’896 patent”) (collectively the “patents in Suit” or “Asserted patents”) and provide their accompanying document production. As required by Local patent Rule 8(b), claim charts are attached herewith as Appendices A-1 through A-3, B-1 through B-3, C-1 through C-3, D-1 through D-3, E-1 through E-3, F-1 through F-4, G-1 through G-2, H-1 through H-2, I-1 through I-2, J-1 through J-2 and K-1 through K-2.

Discovery in this case is ongoing, and Samsung's investigation in connection with this lawsuit is continuing. These disclosures are based on information obtained by Samsung to date. To the extent that Samsung obtains additional information, as well as pursuant to the terms of the Scheduling Order in this case, Samsung reserves the right to supplement these Invalidity Contentions.

Samsung's Invalidity Contentions are directed only to the Asserted Claims identified in Collect's Amended infringement contentions. Samsung's Invalidity Contentions are not an admission of validity as to any other claim of the patents in Suit.

Samsung's Invalidity Contentions are based, in whole or in part, on Samsung's present understanding of the Asserted Claims and on Collect's implied construction of the claims in its infringement contentions. Based on Collect's infringement contentions, Collect appears to interpret the claims in a broad manner so that they purportedly read on the structure, function and operation of the accused products. Any interpretation in these contentions under Collect's apparent reading of the asserted claims is not a concession that the scope of the asserted claims, properly construed, would support or allow such an interpretation, but only that if the claims were broad enough to read on the accused devices in the manner Collect alleges, they also would read on the prior art, as demonstrated herein. Samsung expressly reserves the right to contest any and all of Collect's claim constructions, and to offer Samsung's own claim constructions for any terms at the appropriate time, and Samsung offers these contentions without prejudice to any position Samsung may take as to any claim construction issues (including that a term may be indefinite). Samsung submits these Invalidity Contentions without waiving any argument that Collect's infringement contentions do not fully or properly disclose Collect's infringement theories. Samsung reserves the right to amend, supplement, or modify its invalidity contentions in view of the positions taken by

the parties during claim construction and/or after the Court construes terms in the patents in Suit, including to rely on only a subset of the art identified in the attached appendices for one or more of the claim limitations.

As explained below, a number of the limitations of the asserted claims do not have a sufficiently well-defined scope. As a result, based on the claim language alone, it is not always possible to determine whether the prior art discloses these limitations. For these instances, Samsung relies on Collect's interpretation of the scope of the claims through its Infringement Contentions. Samsung's identification of disclosure in the prior art satisfying these limitations is not an admission that the scope of the claims is sufficiently well-defined.

The information and documents that Samsung is producing are preliminary and subject to supplementation, amendment and/or further revision, including as permitted by the Court's Scheduling Order (Dkt. No. 27). Further, because Samsung's search for and analysis of relevant prior art is continuing, Samsung reserves the right to revise, amend, and/or supplement the information provided herein, including identifying, charting, and relying on additional references, should Samsung's further search and analysis yield additional information or references, consistent with this Court's Order, the Federal Rules of Civil Procedure, and/or the Local Rules of the District of Colorado.

Samsung further intends to rely on evidence concerning the scope of the prior art relevant to the patents in Suit found in, *inter alia*: the patent prosecution history for the patents in Suit, including any related patents and/or patent applications; any deposition testimony of the named inventors of the patents in Suit, and related patents and/or patent applications in this action or any other action; and any other evidence submitted by Collect in connection with this action or any related action.

Samsung reserves the right to assert that the asserted claims are invalid under 35 U.S.C. §§ 102(f) or 102(g) in the event Samsung obtains evidence that the inventors named in the patents in Suit patent did not invent (either alone or in conjunction with others) the subject matter claimed in the patents in Suit. Should Samsung obtain such evidence, it will provide the name of the person(s) from whom and the circumstances under which the invention or any part of it was derived.

I. ASSERTED CLAIMS

Collect has alleged that Samsung products infringe the following claims of the patents in Suit (the “Asserted Claims”):

- The ‘839 patent: Claims 1, 4, 28, 30;
- The ‘255 patent: Claims 1, 4, 7, 8, 11;
- The ‘369 patent: Claims 1, 17, 19, 21, 22, 27, 49, 55, 61;
- The ‘626 patent: Claims 1, 5, 11, 33, 34, 58, 64;
- The ‘036 patent: Claims 1, 2, 6, 17, 33, 35;
- The ‘740 patent: Claims 1, 2, 13;
- The ‘742 patent: Claims 22, 42, 58, 66;
- The ‘621 patent: Claims 25, 26, 27, 28, 29, 33;
- The ‘052 patent: Claims 1, 2, 3, 7;
- The ‘565 patent: Claims 1, 6, 31, 32, 36;
- The ‘896 patent: Claims 1, 5, 21.

Should Collect obtain leave of Court to assert different claims from the patent in Suit, Samsung reserves the right to supplement these contentions to address the invalidity of those claims.

Samsung herein identifies the prior art references which Samsung currently contends render one or more Asserted Claims invalid. Samsung may rely on any of the prior art set forth

in the tables below in support of its defenses, including, without limitation, to demonstrate the state of the art and/or the knowledge of a person of ordinary skill in the art. The identified prior art may constitute prior art in more than one respect. By way of example and without limitation, Samsung may rely on the identified prior art as a prior patent or publication, but also as evidence of a prior public use or barring sale.

II. PRIOR ART REFERENCES

Samsung identifies the references and systems below as art that Samsung contends renders obvious the Asserted Claims. In addition, Samsung may rely on one or more of the references produced herewith (SAM-438_00172963 through SAM-438_00200093) as evidence of the background, knowledge, skill and creativity of a POSITA.

A. Prior Art patents and patent Publications

patent/ Publication Number	First-Named Inventor	Priority Date	Date of Issue/ Publicatio n	Bates Range
WO95/34988	Swift	6/14/1994	12/21/1995	SAM-438_00187949 - SAM438_00187980
US5919130A	Monroe	03/14/1995	07/06/1999	SAM-438_00199699 - SAM438_00199720
US5835141	Ackland	11/22/1994	11/10/1998	SAM-438_00174137 - SAM438_00174146
US5665959	Fossum	01/13/1995	09/09/1997	SAM-438_00177420 - SAM438_00177431
US5236871	Fossum	04/29/1992	08/17/1993	SAM-438_00177406 - SAM438_00177412
US5837994	Stam	04/02/1997	11/17/1998	SAM-438_00187920 - SAM-438_00187940
US4700219	Tanaka	04/09/1984	10/13/1987	SAM-438_00191190 - SAM438_00191197
US5233426	Suzuki	12/28/1990	08/03/1993	SAM-438_00187942 - SAM438_00187948
US5774569	Waldenmaier	07/25/1994	06/30/1998	SAM-438_00197763 - SAM438_00197790
US5903706	Wakabayashi	08/26/1994	05/11/1999	SAM-438_00197733 - SAM438_00197762

US6977685	Acosta-Serafini	2/26/1999	12/20/2005	SAM-438_00174157 - SAM438_00174191
DE19933471	Riedel	07/20/1999	01/02/2001	SAM-438_00184618 - SAM438_00184627; SAM-438_00199691- SAM438_00199698
JPH07275198	Tomoyasu	4/13/1994	10/24/1995	SAM-438_00199721- SAM438_00199749
WO99/18613	Adair	10/6/1997	04/15/1999	SAM-438_00174259 - SAM438_00174306
US6009336	Harris	07/10/1996	12/28/1999	SAM-438_00177805 - SAM438_00177821
US5541640	Larson	04/19/1995	07/30/1996	SAM-438_00182360 - SAM438_00182398
JPH08140143	Yakida	11/15/1994	05/31/1996	SAM-438_00199006 - SAM438_00199031; SAM-438_00199032 - SAM438_00199044
US6069588	O'Neill	02/11/1999	05/30/2000	SAM-438_00184320 - SAM438_00184331
US6812958	Silvester	09/10/1998	11/02/2004	SAM-438_00184986 - SAM438_00184999
US6771935	Leggett	10/05/1998	08/03/2004	SAM-438_00182410 - SAM438_00182414
US6202060	Tran	10/29/1996	03/13/2001	SAM-438_00189176 - SAM438_00189223
US5221964	Chamberlain	08/05/1991	06/22/1993	SAM-438_00175187 - SAM438_00175199

B. Prior Art Non-patent Literature (“NPL”) Publications

Title	Author	Date of Publication	Bates Range
“NASA’s Tiny Camera Has a Wide-Angle Future,” Business Week (March 6, 1995)	Business Week	03/06/1995	SAM-438_00174974 - SAM-438_00174976
“CMOS Active Pixel Image Sensor Containing Pinned Photodiodes,” Nasa Tech Briefs (October 1996)	Fossum/NASA	Oct-1996	SAM-438_00184121 - SAM-483_00184123

Title	Author	Date of Publication	Bates Range
“800-Thousand-Pixel Color CMOS Sensor for Consumer Still Cameras,” Proceedings of SPIE	Hurwitz	04/25/1997	SAM-438_00177852 - SAM-438_00177860
“Standard CMOS Active Pixel Image Sensors for Multimedia Applications,” Proceedings Sixteenth Conference on Advanced Research in VLSI, (Mar. 27-29, 1995)	Dickinson	Mar-1995	SAM-438_00175856 - SAM-438_00175867
Sharp Compact Color CCD Camera Module For Multimedia YH-7B12/8B12 Series	Sharp Corp.	Apr-1996	SAM-438_00199282 - SAM-438_00199283
IEEE 802.15 WPAN™ Task Group 3 (TG3)	IEEE	10/09/2000	SAM-438_00199371 - SAM-438_00199371

C. Prior Art Systems

Name	Manufacturer/Developer
Vivi Cam3000 Digital Camera User Guide	Vivitar Digital Imaging
CU-SeeMe Software	Cornell University

III. CLAIM CHARTS

Appendices A-1 through A-3, B-1 through B-3, C-1 through C-3, D-1 through D-3, E-1 through E-3, F-1 through F-4, G-1 through G-2, H-1 through H-2, I-1 through I-2, J-1 through J-2 and K-1 through K-2, hereby incorporated by reference, identify exemplary locations in the prior art where each limitation of the Asserted Claims can be found. In an effort to focus the issues, Samsung has cited exemplary relevant portions of references, although references may contain additional relevant disclosure for a particular asserted claim limitation. Samsung

reserves the right to rely upon other portions of the references identified in the claim charts and the references disclosed herein to support its claims and/or defenses.

Samsung, for example, may rely upon un-cited portions of the references disclosed herein, the prior art cited by the references, and on other publications and expert testimony, including to provide context and as aids to understanding and interpreting the portions of the prior art references that are cited. Samsung may also rely upon un-cited portions of the prior art references, other publications, admissions in the file histories of the patents in Suit, as well as the testimony of experts or fact witnesses, such as inventors. Where Samsung cites to a particular figure in a prior art reference, the citation should be understood to encompass the caption and description of the figure and any text relating to the figure in addition to the figure itself. Likewise, where a cited portion of text refers to a figure, the citation should be understood to include the figure as well.

IV. INVALIDITY OF THE ASSERTED CLAIMS BASED ON THE PRIOR ART

A. Invalidity Under § 103

Appendices A-1 through A-3, B-1 through B-3, C-1 through C-3, D-1 through D-3, E-1 through E-3, F-1 through F-4, G-1 through G-2, H-1 through H-2, I-1 through I-2, J-1 through J-2 and K-1 through K-2, hereby incorporated by reference, identify exemplary locations in the prior art where each element of the Asserted Claims can be found, either explicitly, implicitly, or inherently, as understood by a POSITA. Samsung has identified at least one citation per element for each charted reference where a POSITA would have understood that the cited reference discloses explicitly, implicitly, or inherently that particular element. Samsung further contends that the prior art identified in Appendices A-1 through A-3, B-1 through B-3, C-1 through C-3, D-1 through D-3, E-1 through E-3, F-1 through F-4, G-1 through G-2, H-1 through H-2, I-1

through I-2, J-1 through J-2 and K-1 through K-2, in view of the knowledge of a POSITA, render the Asserted Claims obvious pursuant to 35 U.S.C. § 103.

The Asserted Claims of the Asserted patents are nothing more than a combination of standard, conventional elements already existing and well known at the time of the purported inventions, combined according to known methods to achieve predictable results. The Asserted Claims have been fashioned by mixing-and-matching known structures in various configurations in a non-inventive way.

All of the following rationales support a finding of obviousness here:

1. Combining prior art elements according to known methods to yield predictable results;
2. Simple substitution of one known element for another to obtain predictable results;
3. Use of a known technique to improve similar devices (methods or products) in the same way;
4. Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
5. “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
6. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; and
7. Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Samsung further contends that the prior art identified in these Invalidity Contentions is evidence of simultaneous or near-simultaneous independent invention by others of the alleged invention as recited in one or more of the Asserted Claims. Samsung reserves its right to rely on the simultaneous or near-simultaneous independent invention by others as further evidence of the obviousness of the Asserted Claims.

Each limitation of the Asserted Claims was well known to those of ordinary skill in the art before the filing dates of the application to which the Asserted patents claim priority, as detailed in the attached charts. While Collect has asserted that the asserted claims of the '740 patent claims priority to November 24, 1997, and that the asserted claims of the other Asserted patents claim priority to October 6, 1997, Collect has failed to identify any support for that assertion. Accordingly, each of the references included in the attached charts is prior art based on the reasons in those charts. If Collect identifies support for its assertions of earlier priority dates, Samsung reserves the right to revise its contentions to identify additional art that addresses the earlier priority dates.

Combinations of prior art references are further described in Appendices A-1 through A-3, B-1 through B-3, C-1 through C-3, D-1 through D-3, E-1 through E-3, F-1 through F-4, G-1 through G-2, H-1 through H-2, I-1 through I-2, J-1 through J-2 and K-1 through K-2. The elements recited in the Asserted Claims are mere combinations and modifications of these well-known elements. A person of ordinary skill in the art would be able, and motivated,¹ to improve

¹ As required by the Local Rules, Samsung in these contentions identifies the combinations of prior art and how combinations render the claims obvious. PTtR 8(b)(3). Samsung will provide evidence of the motivations to combine references at the time required under the court's scheduling order. Dkt. No. 27.

the existing technology in the same or similar manner by combining or modifying the individual elements that were already known in the art to yield predictable results.

B. Level of Ordinary Skill in the Art

On or before October 11, 1997, a POSITA relating to the technology of the patents in Suit would have had a minimum of a Bachelor's degree in Electrical Engineering, physics or a comparable field, with approximately two-years of work experience working with imaging devices. Additional graduate education could substitute for professional experience, or significant experience in the field could substitute for formal education. A POSITA is presumed to have knowledge of all relevant prior art, and therefore would have been familiar with each of the references cited herein and the full range of teachings they contain.

V. INDEFINITENESS, LACK OF WRITTEN DESCRIPTION, AND LACK OF ENABLEMENT OF THE ASSERTED CLAIMS UNDER 35 U.S.C. § 112

A. Invalidity Under 35 U.S.C. § 112(1).

The patent Act requires that a patent specification “shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains.” 35 U.S.C. § 112(1) (now § 112(a)). These are known as the written description and enablement requirements, which are evaluated from the standpoint of a POSITA at the time of the invention. *See, e.g., Ariad Pharms., Inc. v. Eli Lilly and Co., Inc.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc).

The purpose of the written description requirement is to ensure that the scope of the patent claims does not overreach the scope of the inventor's contribution to the field of art as described in the patent specification. *Id.* at 1353-54 (quoting *Univ. of Rochester v. G.D. Searle & Co., Inc.*, 358 F.3d 916, 920 (Fed. Cir. 2004)). The written description requirement is part of

the quid pro quo of the patent grant and ensures that the public receives a meaningful disclosure in exchange for being excluded from practicing an invention for a period of time. *See Ariad*, 598 F.3d at 1354. The enablement requirement is only met if the specification describes “how to make and use the invention” without undue experimentation. *Martek Biosciences Corp v. Nutrinova, Inc.*, 579 F.3d 1363, 1378 (Fed. Cir. 2009) (“To meet the enablement requirement, the specification of a patent must teach those skilled in the art how to make and use the full scope of the claimed invention without undue experimentation.”).

As a general matter, Collect appears to be broadly interpreting numerous claim limitations such that there is no written description support for the claims if construed as broadly as Collect proposes. Samsung reserves the right to raise a written description defense for additional terms once we see Collect’s proposed claim constructions.

Samsung identifies the following limitations as lacking written description and/or enabling support:

Claim 22 of the ’742 patent requires a “transceiver radio element being electrically coupled to the video view screen of the PDA enabling viewing of the converted pre-video signals.” However, there is no disclosure in the ’742 patent specification (or the other disclosures that are incorporated by reference into the ’742 patent specification) of a transceiver radio element that is electrically coupled to the view screen of a PDA. Accordingly, claim 22 of the ’742 patent and its dependent claims are invalid under 35 U.S.C. § 112(1) for lack of written description.²

² Although Samsung identifies only the claims that include the terms that lack written description or enabling support, or that include the specific language that makes those claims indefinite, all dependent claims from the identified claims are also invalid under 35 U.S.C. § 112.

Claims 33 and 64 of the '626 patent and claim 61 of the '369 patent require “a transceiver/amplifier section . . . amplifying video and audio signals.” Claim 66 of the '742 patent and claim 45 of the '621 patent require a “transceiver/amplifier section . . . amplifying and further transmitting the converted pre-video signal . . . and amplifying video and audio signals transmitted by another party.” However, there is no disclosure in the specifications of these patents (or any other disclosures that are incorporated by reference into the patent specifications) of a transceiver/amplification “amplifying” any video or audio signals. Accordingly, claims 33 and 64 of the '626 patent, claim 66 of the '742 patent, claim 45 of the '621 patent and their dependent claims are invalid under 35 U.S.C. §112(1) for lack of written description.

Claim 28 of the '839 patent requires “a power supply coupled to said control box, said array of CMOS pixels and said timing and control means for providing power thereto.” '839 patent claim 28 (emphasis added). Similarly, claim 8 of the '255 patent requires “a power supply coupled to said control box and said image sensor for providing power thereto.” '255 patent claim 8 (emphasis added). However, there is no disclosure in the '839 patent specification or the '255 patent specification (or any other disclosures that are incorporated by reference into the '839 or '259 patent specifications) of a power supply coupled to a control box for providing power to the control box itself. Accordingly claim 58 of the '626 patent, claim 17 of the '036 patent, and their dependent claims are invalid under 35 U.S.C. §112(1) for lack of written description.

Claims 1, 2, and 3 of the '052 patent all require that “a largest dimension of said image sensor along said first plane is between 2 and 12 millimeters.” *See* '052 patent claims 1-3. However, there is no disclosure in the '052 patent specification (or any other disclosures that are incorporated by reference into the '052 patent specification) of an image sensor ranging between

2 and 12 millimeters in size. Accordingly, claims 1, 2, and 3 of the '052 patent and their dependent claims are invalid under 35 U.S.C. §112(1) for lack of written description.

Claim 58 of the '626 patent and claim 17 of the '036 patent generally describe a video telephone for receiving and transmitting telephone communications and video signals to a “party to whom a call was made.” Among other things, claim 58 of the '626 patent requires a “camera module communicating with circuitry within said video telephone enabling viewing of said video images on said video telephone and enabling video signals to be transmitted from said camera module for viewing by said party.” '626 patent claim 58 (emphasis added). Similar, claim 17 of the '036 patent requires a “camera module communicating with circuitry within said video telephone enabling viewing on said video telephone and enabling video signals to be transmitted from said camera module for viewing by said party.” '036 patent claim 17 (emphasis added). However, there is no disclosure in the '626 patent specification or the '036 patent specification (or any other disclosures that are incorporated by reference into the '626 or '036 patent specification) of a camera module enabled to transmit video signals to the other party. Accordingly claim 58 of the '626 patent, claim 17 of the '036 patent, and their dependent claims are invalid under 35 U.S.C. §112(1) for lack of written description.

Claim 28 of the '621 patent requires “said transceiver radio element communicates with the video telephone by an IEEE 802.15.3 communications standard.” However, the 802.15.3 standard was still being developed by others at the time the applications for these patents were being filed. '621 patent 4:67-5:6. Thus, there is no disclosure in the '621 patent specification that would convey to a POSITA how to actually make and use the claimed invention. Accordingly, claim 28 of the '621 patent and its dependent claims are is invalid under 35 U.S.C. §112(1) for lack of enablement.

Claim 32 of the '565 patent, claims 1 and 7 of the '052 patent, and claims 1 and 21 of the '896 patent recite an image sensor that has a “generally square shape.” Specifically, claim 32 of the '565 patent and claims 1 and 7 of the '052 patent require that “said image sensor has a generally square shape along said first plane,” and claims 1 and 21 of the '896 patent require that “the image sensor is generally square shape along the first plane.” However, the only disclosed shapes of the image sensor are perfectly square or circular. Accordingly, claim 32 of the '565 patent, claims 1 and 7 of the '052 patent, claims 1 and 21 of the '896 patent, and their dependent claims are invalid under 35 U.S.C. §112(1) for lack of written description.

Claims 1 and 28 of the '839 patent; claim 1 of the '255 patent; claims 1, 49, and 55 of the '369 patent; claims 1, 33, 55, and 64 of the '626 patent; claims 1 and 33 of the '036 patent; claim 1 of the '740 patent; claims 42 and 58 of the '742 patent; claim 25 of the '621 patent; claims 1, 2, and 3 of the '052 patent; claims 1 and 31 of the '565 patent; and claims 1 and 21 of the '896 patent refer to at least “a first plane” and “a second plane,” with components in those planes. Specifically, as shown in the table below, each of these claims refers to some component in a “first plane” (e.g., an “image sensor” or a “array of CMOS pixels”) and a separate component in a “second plane” (e.g., a “circuit board” containing timing or processing means):

Asserted Claim	Example Limitation
'839 patent: Claim 1; '255 patent: Claim 1; '740 patent: Claim 1; '369 patent: Claims 1, 49, 55; '626 patent: Claim 1; '036 patent: Claim 1; '742 patent: Claim 42.	an “image[] sensor <u>lying in a first plane</u> ” and “a first circuit board <u>lying in a second plane</u> ”
'626 patent: Claim 33.	an “image sensor <u>lying in a first plane</u> ” and “a first circuit board <u>residing on a second plane</u> ”
'565 patent: Claim 1; '052 patent: Claims 1, 2; '896 patent: Claims 1.	“said image sensor including a first circuit board ... wherein said length and width of said first circuit board <u>define a first plane</u> ” and “wherein said length and width of said second circuit board <u>define a second plane</u> ”
'565 patent: Claim 31; '052 patent: Claim 3; '896 patent: Claim 21.	“said image sensor including a planar substrate ... wherein said length and width of said planar substrate <u>define a first plane</u> ” and “wherein said length and width of said [circuit] board define <u>a second plane</u> ”
'626 patent: Claims 58, 64. '036 patent: Claim 33; '742 patent: Claim 58; '621 patent: Claim 25.	“an image sensor <u>lying in a first plane</u> ” and “said circuitry means for timing and control [...] <u>on a second plane</u> ”
'839 patent: Claim 28.	“an array of CMOS pixels defining a profile area and <u>lying in a first plane</u> ” and a “circuit board <u>lying in a second plane</u> ... including timing and control means”
'052 patent: Claim 3.	“said image sensor including a planar substrate ... said planar substrate define <u>a first plane</u> ” and “said first circuit board define <u>a second plane</u> , said first circuit board including timing and control circuitry thereon”
'369 patent: Claims 49, 55; '742 patent: Claim 42.	an “image sensor <u>lying in a first plane</u> ” and “a first circuit board <u>lying in a second plane</u> ... including circuitry means for timing and control”

To the extent that these claims are interpreted to cover structures in which the elements on the multiple planes are not stacked or placed behind one another, those claims would lack written description, because the alleged invention is limited to structures in which the image sensor in the first plane and the additional circuitry in the second (and/or third) plane are in a stacked relationship (which relate to the claims identified in the above chart), or those structures that

include a control box or phone/PDA body remote from the image sensor (which relate to other claims). Thus, under a broad interpretation in which the claims are not limited to the structures in the first and second (and/or third) planes being in a stacked relationship, claims 1 and 28 of the '839 patent; claim 1 of the '255 patent; claims 1, 49, and 55 of the '369 patent; claims 1, 33, 55, and 64 of the '626 patent; claims 1 and 33 of the '036 patent; claim 1 of the '740 patent; claims 42 and 58 of the '742 patent; claim 25 of the '621 patent; claims 1, 2, and 3 of the '052 patent; claims 1 and 31 of the '565 patent; claims 1 and 21 of the '896 patent; and each of their dependent claims are invalid under 35 U.S.C. § 112(1) for lack of written description.

B. Invalidity Under 35 U.S.C. § 112(2).

The patent Act requires that a patent specification “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as [the] invention.” 35 U.S.C. § 112(2) (now § 112(b)). This is known as the definiteness requirement, and is evaluated from the standpoint of a person of ordinary skill in the art at the time of the invention. *See, e.g., Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2128 (2014) (citing *General Elec. Co. v. Wabash Appliance Corp.*, 304 U.S. 364, 371 (1938)). In order to comply with § 112(2), the patent claims must, when viewed in light of the specification and the prosecution history, inform those skilled in the art about the scope of the invention “with reasonable certainty.” *Nautilus*, 134 S. Ct. at 2129. If a POSITA cannot ascertain the scope of the claims with reasonable certainty, the claim is indefinite.

Samsung identifies the following claims as being indefinite:

Claims 1, 49, and 61 of the '369 patent; claims 1, 33, and 64 of the '626 patent; claims 1 and 33 of the '036 patent; claims 42 and 66 of the '742 patent; and claim 25 of the '621 patent all recite a portable device that includes a screen or monitor “attached” to a portable device. Specifically, claims 1, 49, and 61 of the '369 patent and claims 42 and 66 of the '742 patent

recite a PDA comprising a “video view screen attached to said PDA,” claim 25 of the ’621 patent, claims 1 and 33 of the ’036 patent, and claim 1 of the ’062 patent recite a wireless phone comprising a “video monitor attached to said wireless phone,” and claim 33 and 64 of the ’626 patent recite a video phone comprising a “video monitor attached to said video phone.” A POSITA would not have been able to determine with reasonable certainty whether the claims are intended to cover phones and PDAs that include a viewing element (e.g., a “screen” or “monitor” that forms part of the device and is integrated within the housing), or if the claims are intended to cover phones and PDAs that are connected to an external viewing element (e.g., a separate “screen” or “monitor” that is connected to the device with a cable). Because a POSITA could not ascertain the scope of the claims with reasonable certainty, claims 1, 49, and 61 of the ’369 patent; claims 1, 33, and 64 of the ’626 patent; claims 1 and 33 of the ’036 patent; claims 42 and 66 of the ’742 patent; claim 25 of the ’621 patent; and their dependent claims are invalid as indefinite under 35 U.S.C. § 112(2).

Claims 1, 4, 28 and 30 of the ’839 patent, claims 1, 4, 7, 8 and 11 of the ’255 patent, and claim 1 of the ’740 patent all recite a “reduced area imaging device.” But a POSITA would not be able to determine what baseline “imaging device” is being compared with to determine if a product is a “reduced” area imaging device. Because a POSITA could not ascertain the scope of the claims with reasonable certainty, claims 1, 4, 28 and 30 of the ’839 patent; claims 1, 4, 7, 8 and 11 of the ’255 patent; claim 1 of the ’740 patent; and their dependent claims are invalid as indefinite under 35 U.S.C. § 112(2).

Claims 4 and 28 of the ’839 patent and claim 4 of the ’255 patent require two structures to be both “longitudinally aligned” and “offset” from each other. Specifically, claim 28 of the ’839 patent requires “a circuit board longitudinally aligned with and electrically coupled to

said array of CMOS pixels, said circuit board lying in a second plane which is offset from said first plane and substantially parallel to said first plane.” Claim 4 of the ’839 patent, claim 4 of the ’255 patent³ and their dependent claims require “an image sensor lying in a first plane,” “a first circuit board lying in a second plane and longitudinally aligned with said image sensor” and “said first and second planes are offset from and substantially parallel to each other.” A POSITA would not have been able to determine with reasonable certainty how two structures can be both “offset” and “longitudinally aligned” at the same time. Because a POSITA could not ascertain the scope of the claims with reasonable certainty, claims 4 and 28 of the ’839 patent, claim 4 of the ’255 patent, and their dependent claims are invalid as indefinite under 35 U.S.C. §112(2).

Claim 32 of the ’565 patent, claims 1 and 7 of the ’052 patent, and claims 1 and 21 of the ’896 patent recite an image sensor that has a “generally square shape.” Specifically, claim 32 of the ’565 patent and claims 1 and 7 of the ’052 patent require that “said image sensor has a generally square shape along said first plane,” and claims 1 and 21 of the ’896 patent require that “the image sensor is generally square shape along the first plane.” A POSITA would not have been able to determine with reasonable certainty what is meant by a “generally square shape.” Because a POSITA could not ascertain the scope of the claims with reasonable certainty, claim 32 of the ’565 patent, claims 1 and 7 of the ’052 patent, claims 1 and 21 of the ’896 patent, and their dependent claims are invalid as indefinite under 35 U.S.C. §112(2).

Claims 4 and 28 of the ’839 patent; claim 4 of the ’255 patent; claims 1 and 31 of the ’565 patent; claims 1, 2, and 3 of the ’052 patent; claims 1 and 21 of the ’896 patent; and claim 22 of the ’369 patent require various device elements to be “substantially parallel” to other

³ These claims are indefinite for the reason described in this paragraph to the extent that the term plane means “a flat or level surface defined by the dimensions of the area occupied by a component or structure,” as contended by Collect.

recited device elements. Specifically, claim 4 of the '839 patent, claim 4 of the '255 patent, claim 22 of the '369 patent require that “said first and second planes are offset from and substantially parallel to one another.” Claim 28 of the '849 patent requires “a second plane which is offset from said first plane and substantially parallel to said first plane.” Claim 1 of the '565 patent, claims 1 and 2 of the '052 patent, and claim 1 of the '896 patent require “said second plane of said second circuit board being substantially parallel to said first plane of said first circuit board.” Claim 31 of the '565 patent and claim 21 of the '896 patent require “said second plane of said circuit board being substantially parallel to said first plane of said planar substrate.” Claim 3 of the '052 patent requires both “said first circuit board being substantially parallel to said first plane of said planar substrate ... [and] said third plane of said second circuit board being substantially parallel to said second plane of said first circuit board and to said first plane of said planar substrate.” A POSITA would not be able to determine with reasonable certainty what is meant by a “substantially parallel” orientation. Because a POSITA cannot ascertain the scope of the claims with reasonable certainty, claims 4 and 28 of the '839 patent; claim 4 of the '255 patent; claims 1 and 31 of the '565 patent; claims 1, 2, and 3 of the '052 patent; claims 1 and 21 of the '896 patent; claim 22 of the '369 patent; and their dependent claims are invalid as indefinite under 35 U.S.C. §112(2).

Claims 22 of the '742 patent recites “a camera module for taking video images, said camera module communicating with circuitry within said PDA enabling viewing on said video view screen and enabling video signals to be transmitted from said camera module to said computer.” '742 patent claim 22 (emphasis added). However, there is no antecedent basis for the recitation of “said” computer, and a POSITA would not have been able to determine with

reasonable certainty what structure “said computer” is referring to, thus rendering the claim and its dependent claims invalid as indefinite under 35 U.S.C. §112(2).

Claim 61 of the ’369 patent, claims 33 and 64 of the ’626 patent, and claim 66 of the ’742 patent refer to “said imaging device” without a prior recitation of “an imaging device.” Specifically, claim 61 of the ’369 patent and claim 66 of the ’742 patent refer to “a video view screen attached to said PDA, said video view screen for selectively displaying images from said imaging device,” and claim 33 and 64 of the ’626 patent refer to “a video monitor attached to said video phone, said video monitor for selectively displaying images from said imaging device.” Because there is no antecedent basis for the recitation of “said” imaging device, a POSITA would not have been able to determine with reasonable certainty what structure “said imaging device” is referring to, or the source of the “images” to be displayed by the video view screen, and thus claim 61 of the ’369 patent, claims 33 and 64 of the ’626 patent, claim 66 of the ’742 patent, and their dependent claims are invalid as indefinite under 35 U.S.C. §112(2).

Claims 1 and 33 of the ’036 patent refer to “a video monitor attached to said wireless phone for viewing said video images.” ’036 patent claims 1, 33 (emphasis added). However, there is no antecedent basis for the recitation of “said” video images, and a POSITA would not have been able to determine with reasonable certainty what “said video images” are viewed on the video monitor, thus rendering the claims and their dependent claims invalid as indefinite under 35 U.S.C. §112(2).

Claim 33 of the ’621 patent refers to “a camera module for taking video images, said camera module communicating with circuitry within said video enabling video signals to be transmitted from said camera module.” ’621 patent claim 33 (emphasis added). However, there is no antecedent basis for the recitation of “said” video enabling video signals, and a POSITA

would not have been able to determine with reasonable certainty what “said video enabling video signals” is referring to, thus rendering the claim and its dependent claims invalid as indefinite under 35 U.S.C. §112(2). Moreover, a POSITA would not understand what “video enabling video signals” are, or how there can be “circuitry” within signals. To the extent that there is a typographical error in the claim, there is no clear way for the Court to correct the claim to make it understandable. For example, two equally possible corrections would be to revise the language to “said video screen enabling video signals” and “said video telephone enabling video signals.” For this independent reason, claim 33 of the ’621 patent and its dependent claims are invalid as indefinite under 35 U.S.C. § 112(2).

Claim 21 of the ’896 patent requires that “a largest dimension of said second circuit board along said second plane is greater than a largest dimension of said image sensor along said first plane.” ’896 patent claim 21 (emphasis added). However, there is no antecedent basis for the recitation of “said” second circuit board, and a POSITA would not have been able to determine with reasonable certainty what structure “said second circuit board” is referring to, thus rendering the claim and its dependent claims invalid as indefinite under 35 U.S.C. §112(2).

Claim 22 of the ’369 patent requires that “said first and second planes are offset from and substantially parallel to one another.” ’369 patent claim 22 (emphasis added). However, there is no antecedent basis for the recitation of “said” second plane, and a POSITA would not have been able to determine with reasonable certainty what structure “said ... second plane” is referring to, thus rendering the claim and its dependent claims invalid as indefinite under 35 U.S.C. §112(2).

Claim 58 of the ’742 patent requires “enabling viewing of said video images on said PDA and enabling video signals to be transmitted from said camera module to the personal computer.” However, there is no antecedent basis for the recitation of “the personal computer,”

and a POSITA would not have been able to determine with reasonable certainty what structure “the personal computer” is referring to, thus rendering the claim and its dependent claims invalid as indefinite under 35 U.S.C. §112(2).

Claims 1 and 28 of the '839 patent; claims 1 and 8 of the '255 patent; claims 1, 17 49, 55 and 61 of the '369 patent; claims 1, 33, 58, and 64 of the '626 patent; claims 1, 17 and 33 of the '036 patent; claims 1 and 13 of the '740 patent; claims 22, 42, 58 and 66 of the '742 patent; claims 25, 29 and 33 of the '621 patent; claims 1, 2, and 3 of the '052 patent; claims 1 and 31 of the '565 patent; and claims 1 and 21 of the '896 patent refer to “circuitry [means] for . . . timing and control.” To the extent these limitations are subject to 35 U.S.C. § 112(6), the specification does not disclose sufficient structure clearly linked to the claimed functionality to inform a person of skill in the art about the structure covered by these claims and their dependent claims, thus rendering these claims invalid as indefinite under 35 U.S.C. 112(2).

Claims 1 and 28 of the '839 patent; claim 1 of the '255 patent; claims 1, 49, and 55 of the '369 patent; claims 1, 33, 58, and 64 of the '626 patent; claims 1 and 33 of the '036 patent; claim 1 of the '740 patent; claims 42 and 58 of the '742 patent; claim 25 of the '621 patent; claims 1, 2, and 3 of the '052 patent; claims 1 and 31 of the '565 patent; and claims 1 and 21 of the '896 patent refer to at least “ a first plane” and “a second plane,” with components in those planes. Specifically, as shown in the table below, each of these claims refers to some component in a “first plane” (e.g., an “image sensor” or a “array of CMOS pixels”) and a separate component in a “second plane” (e.g., a “circuit board” containing timing or processing means):

Asserted Claim	Example Limitation
'839 patent: Claim 1; '255 patent: Claim 1; '740 patent: Claim 1; '369 patent: Claims 1, 49, 55; '626 patent: Claim 1; '036 patent: Claim 1; '742 patent: Claim 42.	an “image[] sensor <u>lying in a first plane</u> ” and “a first circuit board <u>lying in a second plane</u> ”
'626 patent: Claim 33.	an “image sensor <u>lying in a first plane</u> ” and “a first circuit board <u>residing on a second plane</u> ”
'565 patent: Claim 1; '052 patent: Claims 1, 2; '896 patent: Claims 1.	“said image sensor including a first circuit board ... wherein said length and width of said first circuit board <u>define a first plane</u> ” and “wherein said length and width of said second circuit board <u>define a second plane</u> ”
'565 patent: Claim 31; '052 patent: Claim 3; '896 patent: Claim 21.	“said image sensor including a planar substrate ... wherein said length and width of said planar substrate <u>define a first plane</u> ” and “wherein said length and width of said [circuit] board define <u>a second plane</u> ”
'626 patent: Claims 58, 64. '036 patent: Claim 33; '742 patent: Claim 58; '621 patent: Claim 25.	“an image sensor <u>lying in a first plane</u> ” and “said circuitry means for timing and control [...] <u>on a second plane</u> ”
'839 patent: Claim 28.	“an array of CMOS pixels defining a profile area and <u>lying in a first plane</u> ” and a “circuit board <u>lying in a second plane</u> ... including timing and control means”
'052 patent: Claim 3.	“said image sensor including a planar substrate ... said planar substrate define <u>a first plane</u> ” and “said first circuit board define <u>a second plane</u> , said first circuit board including timing and control circuitry thereon”
'369 patent: Claims 49, 55; '742 patent: Claim 42.	an “image sensor <u>lying in a first plane</u> ” and “a first circuit board <u>lying in a second plane</u> ... including circuitry means for timing and control”

Because the claims do not specify how to identify the locations of the planes in the identified structures, a POSITA would not have been able to determine with reasonable certainty what structures satisfy the arrangements of the first and second planes, thus rendering claims 1 and 28 of the '839 patent; claim 1 of the '255 patent; claims 1, 49, and 55 of the '369 patent; claims 1, 33, 55, and 64 of the '626 patent; claims 1 and 33 of the '036 patent; claim 1 of the '740 patent;

claims 42 and 58 of the '742 patent; claim 25 of the '621 patent; claims 1, 2, and 3 of the '052 patent; claims 1 and 31 of the '565 patent; claims 1 and 21 of the '896 patent; and their dependent claims invalid as indefinite under 35 U.S.C. § 112(2).

Claim 58 of the '742 patent requires an “image sensor lying in a first plane and including an array of pixels” and also “including circuitry means for timing and control,” with “said circuitry means for timing and control placed remote from said array of pixels on a second plane.” A POSITA would not have been able to determine with reasonable certainty whether the circuitry means for timing and control of claim 58 must be placed in the same plane as the image sensor, together with the pixels, or whether the circuitry means for timing and control must be placed in a different plane than the image sensor, remote from the pixels, thus rendering claim 58 of the '742 patent and its dependent claims invalid as indefinite under 35 U.S.C. § 112(2).

Claim 13 of the '740 patent requires “adjusting a charge integration period of the imager by manipulating time select switch to maximize desired brightness of the image.” A POSITA would not have been able to determine with reasonable certainty what is meant by “maximize desired brightness of the image,” thus rendering this claim and its dependent claims invalid as indefinite under 35 U.S.C. § 112(2).

VI. OBVIOUSNESS-TYPE DOUBLE PATENTING

35 U.S.C. § 101 states “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter ... may obtain *a* patent therefor.” “While often described as a court-created doctrine, obviousness-type double patenting is grounded in the text of the patent Act.” *AbbVie Inc. v. Mathilda & Terrence Kennedy Inst. of Rheumatology Trust*, 764 F.3d 1366, 1372 (Fed. Cir. 2014). “Thus, § 101 forbids an individual from obtaining more than one patent on the same invention, *i.e.*, double patenting.” *AbbVie*, 764 F.3d at 1372. In addition to “statutory” double patenting, obviousness-type (“non-statutory”) double patenting is a judicially

created corollary doctrine that bars “the issuance of claims in a second patent that are not patentably distinct from the claims of the first patent.” *In re Hubbell*, 709 F.3d 1140, 1145 (Fed. Cir. 2013).

Because the question of whether the claims at issue are “patentably distinct implicates the question of obviousness under § 103,” it is also proper to consider what has been disclosed by the prior art. *Otsuka Pharm. Co. v. Sandoz, Inc.*, 678 F.3d 1280, 1297 (Fed. Cir. 2012) (citations omitted). For example, in *In re Ward*, 236 F.2d 428, 431 (CCPA 1956), the court found claims unpatentable due to obviousness-type double patenting in view of the combination of the claimed subject matter of a patent having common ownership and a prior art patent. *See also Hartness Int’l Inc. v. Simplimatic Eng’g Co.*, 819 F.2d 1100, 1108-09 (Fed. Cir. 1987) (affirming lower court’s ruling holding that a patent was invalid for obviousness-type double patenting in view of the same applicants’ earlier filed and granted claims and of the prior art); *In re Ockert*, 245 F.2d 467, 469 (CCPA 1957) (“It is also well settled that, in determining whether the claims of an application are patentably distinct from those of a patent it is proper to consider what is disclosed by the prior art.”).

Obviousness-type double patenting, may exist between an issued patent and an application filed by the same inventive entity, a different inventive entity having a common inventor, a common applicant, and/or a common owner/assignee. *See In re Hubbell*, 709 F.3d at 1146-47. As noted by the Federal Circuit, two policy interests underly the doctrine of double patenting: (1) “to prevent the unjustified timewise extension of the right to exclude granted by a patent no matter how the extension is brought about;” and (2) “to prevent multiple infringement suits by different assignees asserting essentially the same patented invention.” *Id.* at 1145. As discussed below, all of the patents in Suit have either received unjustified extensions and/or expose the public to the risk of harassment by multiple different assignees, and are thus invalid under the doctrine of obviousness-type double patenting.

A. Several patents in Suit Have Received Unjustified Timewise Extensions

The obviousness-type double patenting doctrine prohibits a party from extending the duration of the right to exclude by a later expiring patent's claims that are not "patentably distinct" from claims in an earlier expiring patent. *See, e.g., G.D. Searle LLC v. Lupin Pharms., Inc.*, 790 F.3d at 1349, 1351 (Fed. Cir. 2015); *Eli Lilly & Co. v. Barr Labs., Inc.*, 251 F.3d 955, 967 (Fed. Cir. 2001); *see also Gilead Scis, Inc. v. Natco Pharma Ltd*, 753 F.3d 1208, 1216 (Fed. Cir. 2014), *cert. denied*, 135 S. Ct. 1530 (2015) ("Looking instead to the earliest expiration date of all the patents an inventor has on his invention and its obvious variants best fits and serves the purpose of the doctrine of double patenting.").

1. The '369 patent Impermissibly Extended the Right to Exclude

The Asserted Claims of the '369 patent are invalid for obviousness-type double patenting over the earlier expiring claims of the '036 patent. Because the Asserted Claims of the '369 patent are not patentably distinct from the previously expired claims of the '036 patent, Collect and/or its predecessors in interest to the '369 patent impermissibly extended the duration of the right to exclude, in violation of the doctrine of obviousness-type double patenting. To the extent that additional disclosure is required to support a finding that any differences between the Asserted Claims of the '369 patent and the previously expired claims of the '036 patent were an obvious variation to a POSITA, the prior art disclosed herein provides additional support for the lack of a patentable distinction.

2. The '626 patent Impermissibly Extended the Right to Exclude

The Asserted Claims of the '626 patent are invalid for obviousness-type double patenting over the earlier expiring claims of the '369 patent. Because the Asserted Claims of the '626 patent are not patentably distinct from the previously expired claims of the '369 patent, Collect and/or its predecessors in interest to the '626 patent impermissibly extended the duration of the right to exclude, in violation of the doctrine of obviousness-type double patenting. To the extent that additional disclosure is required to support a finding that any differences between the Asserted

Claims of the '626 patent and the previously expired claims of the '369 patent were an obvious variation to a POSITA, the prior art disclosed herein provides additional support for the lack of a patentable distinction.

3. The '740 patent Impermissibly Extended the Right to Exclude

The Asserted Claims of the '740 patent are invalid for obviousness-type double patenting over the earlier expiring claims of the '839 patent. Because the Asserted Claims of the '740 patent are not patentably distinct from the previously expired claims of the '839 patent, Collect and/or its predecessors in interest to the '740 patent impermissibly extended the duration of the right to exclude, in violation of the doctrine of obviousness-type double patenting. To the extent that additional disclosure is required to support a finding that any differences between the Asserted Claims of the '740 patent and the previously expired claims of the '839 patent were an obvious variation to a POSITA, the prior art disclosed herein provides additional support for the lack of a patentable distinction.

4. The '742 patent Impermissibly Extended the Right to Exclude

The Asserted Claims of the '742 patent are invalid for obviousness-type double patenting over the earlier expiring claims of the '369 patent. Because the Asserted Claims of the '742 patent are not patentably distinct from the previously expired claims of the '369 patent, Collect and/or its predecessors in interest to the '742 patent impermissibly extended the duration of the right to exclude, in violation of the doctrine of obviousness-type double patenting. To the extent that additional disclosure is required to support a finding that any differences between the Asserted Claims of the '742 patent and the previously expired claims of the '369 patent were an obvious variation to a POSITA, the prior art disclosed herein provides additional support for the lack of a patentable distinction.

5. The '621 patent Impermissibly Extended the Right to Exclude

The Asserted Claims of the '621 patent are invalid for obviousness-type double patenting over the earlier expiring claims of the '626 patent. Because the Asserted Claims of the '621 patent are not patentably distinct from the previously expired claims of the '626 patent, Collect and/or its predecessors in interest to the '621 patent impermissibly extended the duration of the right to exclude, in violation of the doctrine of obviousness-type double patenting. To the extent that additional disclosure is required to support a finding that any differences between the Asserted Claims of the '621 patent and the previously expired claims of the '626 patent were an obvious variation to a POSITA, the prior art disclosed herein provides additional support for the lack of a patentable distinction.

B. The patents in Suit Expose the Public to Harassment by Multiple Assignees

A second purpose of the double patenting doctrine is to “to prevent multiple infringement suits by different assignees asserting essentially the same patented invention.” *In re Hubbell*, 709 F.3d at 1145, *see also In re Fallaux*, 564 F.3d 1313, 1318-1319 (Fed. Cir. 2009). Thus, the double patenting doctrine applies even if the applicant “is not seeking an unjustified patent term extension.” *Fallaux*, 564 F.3d 1318-1319. Accordingly, the statutory and non-statutory double patenting doctrines are applicable when indistinguishable patents are conveyed to separate entities, thus exposing the public to the danger of multiple assignees attempting to enforce the same rights. *See id.*; *see also Bayer CropScience AG v. Dow AgroSciences LLC*, 60 Fed. Appx. 854 919 (Fed. Cir. 2017) (noting the “potential for separate assignee suits enforcing the same rights” is a policy rationale underlying the double patenting doctrine); *In re Van Ornum*, 686 F.2d 937, 944-48, 214 USPQ 761, 767-70 (CCPA 1982) (noting that the “possibility of multiple suits against an infringer by assignees of related patents has long been recognized as one of the concerns behind the doctrine of double patenting”).

In the present case, the patents in Suit are part of a large family of related patents. While the patents in Suit were eventually conveyed to Collect, USPTO records show that related U.S. patent Nos. 5,929,901 (the “’901 patent”) and 7,030,904 (the “’904 patent”) have been retained by Micro-Imaging Solutions, Inc. (collectively, the “MIS patents”). Because each of the Asserted Claims of the patents in Suit are not patentably distinct from claims in the MIS patents, the divided ownership of the patents in Suit and the MIS patents exposed the public to the risk of harassment from multiple assignees attempting to enforce the same rights, in violation of the doctrine of obviousness-type double patenting. To the extent that additional disclosure is required to support a finding that any differences between the Asserted Claims of the patents in Suit and the claims of the MIS patents were an obvious variation to a POSITA, the prior art disclosed herein provides additional support for the lack of a patentable distinction.

VII. DISCLOSURES PURSUANT TO LOCAL PATENT RULE 9

Contemporaneously with service of these Invalidity Contentions, Samsung produces (or makes available for inspection and copying) a copy of each item of prior art identified under Local patent Rule 8 which does not appear in the file history of the patents in Suit.

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Respectfully submitted,

ROPES & GRAY LLP

By: /s/ Alexander Middleton

Evan Rothstein
ARNOLD & POTTER KAYE SCHOLER
370 Seventeenth Street, Suite 4400
Denver, CO 80202-1370
Telephone: (303) 863-2308
Facsimile: (312).583-2360
Evan.Rothstein@arnoldporter.com

James R. Batchelder
David S. Chun
ROPES & GRAY LLP
1900 University Ave, 6th Floor
East Palo Alto, CA 94303-2284
Telephone: (650) 617-4000
Facsimile: (650) 617-4090
James.Batchelder@ropesgray.com
David.Chun@ropesgray.com

Steve Pepe
Kevin J. Post
Alexander Middleton
ROPES & GRAY LLP
1211 Avenue of the Americas
New York, NY 10036-8704
Telephone: (212) 596-9000
Facsimile: (212) 596-9090
Steven.Pepe@ropesgray.com
Kevin.Post@ropesgray.com
Alexander.Middleton@ropesgray.com

**COUNSEL FOR DEFENDANTS
SAMSUNG ELECTRONICS CO. LTD.
AND SAMSUNG ELECTRONICS
AMEIRCA, INC.**

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on January 21, 2020, a copy of the foregoing
SAMSUNG'S INVALIDITY CONTENTIONS was served on all counsel of record by
electronic mail to:

Jonathan S. Caplan – jcaplan@kramerlevin.com
Marcus A. Colucci – mcolucci@kramerlevin.com
Paul J. Andre – pandre@kramerlevin.com
Kenneth F. Eichner – Ken@EichnerLaw.com
Lynn C. Hartfield – lynn@eichnerlaw.com

By: /s/ Alexander Middleton
Alexander Middleton