

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FACEBOOK, INC. and INSTAGRAM, LLC,

Petitioner,

v.

SKKY, LLC,

Patent Owner.

Case CBM2017-00002
Patent 9,203,870 B2

PATENT OWNER'S PRELIMINARY RESPONSE
37 C.F.R. § 42.207

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Exhibit List

Exhibit	Title
2001	Statutory Disclaimer Under 35 U.S.C. § 253(a) and 37 C.F.R. §1.321(a)

I. Summary of Preliminary Response

On June 15, 2016, Petitioners Facebook, Inc. and Instagram, LLC submitted a Petition requesting that the Board conduct Covered Business Method (CBM) review of U.S. Patent No. 9,203,870 ('870 patent). Institution of CBM review should be denied for at least three reasons:

- The '870 patent does not claim a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, and thus does not qualify for CBM review;
- Petitioners have not demonstrated that the claims of the '870 patent are more likely than not unpatentable under 35 U.S.C. § 101; and
- Petitioners have not demonstrated that the claims of the '870 patent are more likely than not unpatentable under 35 U.S.C. § 112.

For these reasons, discussed in more detail below, the Board should decline to institute CBM proceedings for the '870 patent and reject the Petition.

II. Factual Background of the '870 Patent

The '870 patent, having a priority date of June 26, 2001, generally claims an improved method for wireless delivery of digital audio and/or visual media files from one or more servers to an electronic device. Ex. 1001 at 1. The '870 patent has two independent claims, claims 1 and 8. *Id.* at 46-47. On January 19, 2017, Patent

Owner disclaimed 1) independent claim 1 and its independent claims 2-7; and 2)

dependent claim 9. Ex. 2001. The remaining independent claim 8 recites:

A method for distributing electronic content over a cellular network to a user operating a cellular phone, the method being executable by a computer system that includes server hardware and a database, the method comprising:

providing for the transmission to the cellular phone by orthogonal frequency-division multiplex (OFDM) modulation of a database of electronically accessible data files, each data file being subject to a copyright owner;

receiving, by the computer system, a selection from the cellular phone corresponding to at least one of the data files;

providing for the transmission of, by the computer system and in response to the received selection, a portion of the selected data file to the cellular phone electronic device;

receiving, by the computer system, a request for the data file for which the portion was provided to the cellular phone electronic device; and

providing for the transmitting, by the computer system, of the requested data file to the cellular phone, said cellular phone including a digital signal processor configured to receive the data file over a cellular network by orthogonal frequency-division multiplex (OFDM) modulation.

Ex. 1001 at 47 (33:40-34:18).

As described by claim 8, the claimed method requires a cellular phone containing at least one digital signal processor and must be configured to receive and process files transmitted by orthogonal frequency-division multiplex modulation (“OFDM”). *Id.* In other words, the claimed method relies on a novel, non-obvious cellular phone created by the inventors of the ’870 patent over 15 years ago.

The ’870 patent was invented by two of Skky LLC’s cofounders, Mr. John Mikkelsen and Dr. Robert Freidson, and is a continuation of U.S. Patent No. 9,037,502 (’502 patent), which is a continuation of U.S. Patent No. 7,548,875 (’875 patent). Mr. Mikkelsen and Dr. Freidson worked together in the early 2000s to develop and patent a means to transmit high quality audio and/or visual files to mobile devices. The two inventors were uniquely positioned to design the invention described in the ’870, ’502, and ’875 patents.

Mr. Mikkelsen’s background is in the entertainment industry. As part of his work, he created high quality sound clips that sounded like songs played on the radio. Mr. Mikkelsen then used those sound clips to replace the normal alerts, consisting of simple chimes and beeps, on his computer. As the age of cellular phones was just dawning in the late 1990s, Mr. Mikkelsen believed that cellular phone users would want to wirelessly receive and play high quality audio and/or visual files, such as his sound clips, on their cellular phones.

The missing piece to Mr. Mikkelsen's idea came from his introduction to Dr. Freidson. Dr. Freidson has a Ph.D. in computer science and mathematics from Steklov Mathematical Institute in St. Petersburg, Russia. He is also the inventor on several patents related to telecommunications industry. Dr. Freidson is currently a mathematics professor at St. Petersburg Electrical Engineering University and serves as the chairman of the Russian National Research Center on computer science. Dr. Freidson possesses extensive experience in specialized wireless transmission and telecommunications. Dr. Freidson provided the technical expertise relating to wireless delivery to cellular devices and the playback of high quality audio and visual files on those devices.

Together, the two inventors devised an invention capable of wirelessly receiving and then playing back high quality audio and/or visual files, such as Mr. Mikkelsen's sound clips. They did so in the early 2000s, long before smartphones existed, let alone the iPhones and Galaxies of today. Mr. Mikkelsen and Dr. Freidson then applied for the '875 patent, encompassing their invention.

The '875 patent issued on June 16, 2009 after a lengthy prosecution process. The '870 patent was filed in 2014, with a priority date reaching back to June 27, 2001. Documentation from the prosecution of the '875 patent was submitted during the prosecution of the '870 patent, including a declaration from Dr. Freidson describing his efforts in creating a prototype device encompassing the invention of

the '875 patent. Ex. 1079 at 9. The '870 patent issued on December 1, 2015.

Subsequently, on January 19, 2017, Patent Owner filed a disclaimer, disclaiming claims 1-7 and 9 of the '870 patent. Independent claim 8 and dependent claims 10-14 remain at issue here. Ex. 2001.

III. This Board should reject the Petition on its face because the '870 patent is not a CBM patent.

a. This Board should only consider remaining claims 8 and 10-14 in the '870 patent for CBM review.

When a patent owner files a statutory disclaimer with its preliminary response, “no post-grant review will be instituted based on disclaimed claims.” 37 C.F.R. § 42.207. *See also Google Inc. v. SimpleAir, Inc.*, CBM2015-00019, Paper 15 at 5 (PTAB Aug. 19, 2015) (“Our rules permit a patent owner to file a statutory disclaimer with its preliminary response and no post-grant review will be instituted based on the disclaimed claims.”). As such, “the decision whether to institute a covered business method patent review is based on the ‘claims of the patent as they exist at the time of the decision,’ not as they may have existed at some previous time.” *Id.* at 5. For the purpose of determining whether or not to institute CBM proceedings, disclaimed claims are treated “as never having existed.” *Great West Cas. Co. v. Intellectual Ventures II LLC*, CBM2015-00171, Paper 10 at 7 (PTAB Feb. 9, 2016). The Board correctly followed this approach in denying institution of a related patent. *See Facebook, Inc. v. Skky, LLC*, CBM2016-00091, Paper 7 at 9

(PTAB Nov. 23, 2016) (“This panel treats the disclaimed claims as if they never existed.”). The Board should do the same here.

With claims 1-7 and 9 disclaimed, only Petitioners’ arguments relating to independent claim 8 and its dependent claims 10-14 remain. Ex. 2001. Patent Owner addresses these remaining arguments in turn.

b. Claim 8 is not subject to CBM review because it is not directed to a financial product or service.

i. Claim 8 is not directed to a financial product or service because it does not specifically disclose how money is used or handled.

To qualify for CBM review, a patent must “claim[] a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service,” or is a “patent[] for technological inventions.” A.I.A. § 18(d)(1); 37 C.F.R. § 42.301. The ’870 patent – specifically, claims 8 and 10-14 – contains no such claims, and thus is not eligible for CBM review. *See J.P. Morgan Chase & Co. v. Intellectual Ventures II*, CBM2014-00160, Paper 11 at 5 (PTAB Jan. 29, 2015) (“the Board may institute a transitional proceeding only for a patent that is a CBM patent”); *Facebook*, CBM2016-00091, Paper 7 at 9 (“A patent is eligible for review if it has at least one claim directed to a covered business method.”).

A claim is directed to a financial product or service if the claimed activities are “financial in nature.” *Unwired Planet, LLC v. Google Inc.*, 841 F.3d 1376, 2016

U.S. App. LEXIS 20764, *9 (Fed. Cir. 2016). An activity is financial in nature if it “relate[s] to how money is used or handled.” *Great West Cas.*, CBM 2015-00171, Paper 10 at 10-11. CBM review “was not meant to be applied ‘to technologies common in business environments across sectors and that have no particular relation to the financial services sector, such as computers, communications networks, and business software.’” *Qualtrics, LLC v. OpinionLab, Inc.*, CBM2015-00164, Paper 8 at 5 (PTAB Feb. 3, 2016) (citing 157 Cong. Rec. S5441 (Sept. 8, 2011) (statement of Sen. Leahy)). As such, claims that are “general utility not specific to any application” do not subject the patent to CBM review. *See, e.g., PNC Financial Servs. Group, Inc. v. Intellectual Ventures I, LLC*, CBM2014-00032, Paper 13 at 10 (PTAB May 22, 2014).

Claim 8 is not financial in nature. Claim 8 recites:

A method for distributing electronic content over a cellular network to a user operating a cellular phone, the method being executable by a computer system that includes server hardware and a database, the method comprising:
providing for the transmission to the cellular phone by orthogonal frequency-division multiplex (OFDM) modulation of a database of electronically accessible data files, each data file being subject to a copyright owner;

receiving, by the computer system, a selection from the cellular phone corresponding to at least one of the data files;

providing for the transmission of, by the computer system and in response to the received selection, a portion of the selected data file to the cellular phone electronic device;

receiving, by the computer system, a request for the data file for which the portion was provided to the cellular phone electronic device; and

providing for the transmitting, by the computer system, of the requested data file to the cellular phone, said cellular phone including a digital signal processor configured to receive the data file over a cellular network by orthogonal frequency-division multiplex (OFDM) modulation.

Ex. 1001 at 47 (33:40-34:18). In sum, claim 8 discloses a method for distributing electronic content over a cellular network, that electronic content subject to copyright ownership. On its face, nothing in claim 8 relates to how money is used or handled. Petitioners do not, and cannot, dispute this point. A method to distribute copyrighted electronic content is not related to the financial services sector.

ii. Claim 8’s copyright limitation does not render the claim CBM eligible because copyright ownership is not specific to the financial sector.

Petitioners’ reliance on claim 8’s copyright limitation to establish claim 8 as “financial in nature, incidental to a financial activity or complementary to a

financial activity” is misplaced. Pet. at 7-8. **First**, activities that are “incidental to” or “complementary to” financial activities are insufficient to establish CBM eligibility. *Unwired Planet*, 2016 U.S. App. LEXIS 20764 at *8 (“It is not enough that a sale has occurred or may occur, or even that the specification speculates such a potential sale might occur.”). As such, claims are not “finance-related on their face” when the “only potential commerce related example” required “several leaps of logic in order to relate it to how money is used or handled.” *Great West Cas.*, CBM 2015-00171, Paper 10 at 10-11.

Petitioners’ attempt to connect copyright ownership to “how money is used or handled” requires several unfounded leaps of logic. Copyright ownership arises “in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” 17 U.S.C. § 102. Copyright arises from the simple creation of a work automatically—the author is not required to pay a fee to obtain the copyright or exact payment from the work. For example, when an individual takes a photo with a cellular phone, that individual automatically has copyright ownership over the photo. *See, e.g., Community for Creative Non-Violence v. Reid*, 490 U.S. 730, 737 (1989) (“As a general rule, the author is the party who actually creates the work, that is, the person

who translates an idea into a fixed, tangible expression entitled to copyright protection.”).

Petitioners argue that “the underlying purpose of copyright is to create financial incentives for the creation of original works.” Pet. at 8. This broad interpretation of the purpose and effect of copyright is misplaced. Section 106 of the Copyright Act grants exclusive rights to authors to “do and authorize” a broad range of non-financial activities such as:

- Reproducing the copyrighted work in copies;
- Preparing derivative works based upon the copyrighted work; and
- Performing or displaying the copyrighted work publicly, or to transmit the work publically by means of digital audio transmission.

17 U.S.C. § 106. When a person uploads her vacation photos to her own blog (or, indeed, Facebook’s website), she has a copyright ownership in the photos that existed from the point they were taken. The average person, however, does not charge a fee to view those photos. Rather, the photographer’s friends, family, and the general public browsing the Internet are able to view the photos at no cost. In other words, the photographer may choose to exercise her copyright for artistic or personal reasons, entirely independent of any financial purpose. While it is true that some artists may collect a fee to share their work, limiting the concept of copyright ownership to that context paints with too broad a brush. Connecting copyright

ownership—the mere act of taking a photo—directly to a financial purpose in all cases does not follow. That the claims of a patent could potentially be used for a financial purpose is insufficient to support CBM institution. *Facebook*, CBM2016-00091, Paper 7 at 13-14 (“It is not sufficient for CBM eligibility that the Specification also indicates that ‘in addition’ to these applications, the tracking feature also may be used in the calculation of a royalty fee.”); *Great West Cas.*, CBM2015-00171, Paper 10 at 12 (because financial related examples in specification were “merely non-limiting examples of otherwise general content” institution of CBM review was inappropriate).

Second, Petitioners’ argument that examples in the specification render claim 8 as having a financial purpose is insufficient to support institution of CBM review. *Salesforce.com, Inc. v. Application in Internet Time LLC*, CBM 2014-00162, Paper 11 at 10 (PTAB Feb. 2, 2015) (“Petitioner’s argument fails to address the language of the claims, which is the focus of our inquiry . . . Petitioner’s contentions based on the written description alone do not show that the ’111 patent claims a method or apparatus ‘for performing data processing or other operations used in the practice, administration, or management of a financial product or service’ or claims an activity that is ‘financial in nature, incidental to a financial activity or complementary to a financial activity.’”); *Great West Cas.*, CBM 2015-00171, Paper 10 at 13 (“These disclosures, however, are but a small portion of the

Specification, and in any case, Petitioner has not shown how they inform our analysis of a specific claim limitation of claims 11-20, as is required to make a determination that the '177 patent is a covered business method patent.”). This is consistent with the Board’s prior determinations. For example, in *CoreLogic*, the petitioner attempted to rely on portions of the specification to support its CBM petition. *CoreLogic, Inc. v. Boundary Solutions, Inc.*, CBM2016-00018, Paper 9 at 7 (PTAB May 24, 2016). The Board denied institution because, by relying only on the specification and ignoring the disclosure of the claims themselves, the petitioner at best “established that the claimed methods could be used to generate revenue in a number of ways, even though the language of the claims does not require any exchange of money or other financially related step.” *Id.* at 10. Thus it is the *claims* that determine eligibility, not examples plucked from the specification. Other panels have consistently come to this same conclusion, holding that the focus is on the claims to reach an institution decision. *J.P Morgan Chase*, CBM 2014-00160, Paper 11 at 11 (“for purposes of determining whether a patent is eligible for review as a CBM patent, we focus on the claims”); *Par Pharm., Inc. v. Jazz Pharms., Inc.*, CBM2014-00149, Paper 12 at 9 (PTAB Jan. 13, 2015) (“In making this determination, our focus is firmly on the claims.”).

The Board’s focus on the claims, not the specification, is rooted in the legislative history of the America Invents Act. Examination of the proceedings

leading to the codification of the AIA “explains that the definition of covered business method patent was drafted to encompass patents *claiming* activities that are financial in nature.” *ServiceNow Inc. v. Hewlett-Packard, Co.*, CBM2015-00108, paper 10 at 8 (PTAB Oct. 7, 2015) (citing Transition Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention; Final Rule, 77 Fed. Reg. 48,7343, 48,735 (Aug. 14, 2012)) (emphasis added).

Accordingly, to institute CBM proceedings, the petitioner must “analyze the claim language, in detail and in context, to explain how the claim language recites” a financial purpose. *Par Pharm.*, CBM2014-00149, Paper 12 at 12. Absent this showing, a petitioner’s argument is merely conclusory and does not support institution of CBM proceedings. *Id.* Even if the specification does disclose financial-related embodiments, without a tie to the claims themselves, such disclosures are just general examples, and do not render the patent CBM eligible. *ServiceNow*, CBM2015-00108, Paper 10 at 15 (denying institution of CBM review noting that while the only embodiment disclosed in the specification related to the use of an ATM network, the claims were directed to “general applicability for fault analysis” and thus were non-financial in nature); *Qualtrics*, CBM2015-00164, Paper 8 at 6 (denying institution of CBM review because potential financial uses in specification were “purely exemplary”); *Great West Cas.*, CBM 2015-00171, Paper

10 at 12 (because financial related examples in specification were “merely non-limiting examples of otherwise general content” institution of CBM review was inappropriate); *Facebook*, CBM2016-00091, Paper 7 at 13-14 (denying institution for CBM review because “[i]t is not sufficient for CBM eligibility that the Specification also indicates” that the claimed method “also may be used in the calculation of a royalty fee”).

Petitioners failed to meet this burden. Petitioners argue, in a single paragraph, that claim element “providing for the transmission to the cellular phone...of a database of electronically accessible data files, each data file being subject to a copyright owner” reflects a financial purpose. Pet. at 9. Contrary to controlling law, Petitioners do not point to the claim language itself as claiming the exchange of money or financial purpose but instead cite to two short passages in the specification relating to royalty payments. *Id.* at 8-9. Petitioners’ argument should be rejected.

Examples in the ’870 patent specification relating to royalty payments do not render claim 8 CBM eligible. The specification may contain disclosure beyond what is claimed by the patent. *TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1373 (Fed. Cir. 2008) (“Our precedent is replete with examples of subject matter that is included in the specification, but is not claimed.”). Here, the specification discloses examples of potential embodiments to which the claims may

be generally applied, which are by themselves insufficient support to institute CBM proceedings. *E.g.*, *ServiceNow*, CBM2015-00108, Paper 10 at 15. Petitioners single out the language “each data file being subject to a copyright owner” as grounds for CBM institution. As discussed above, however, there are many reasons a data file would be associated with a copyright owner. Indeed, whenever any individual takes a photo, he or she becomes a copyright owner. *Community for Creative Non-Violence*, 490 U.S. at 737. That does not mean that the photographer is seeking money or has a financial purpose in mind for her work. While it is true that some subset of copyright holders seek royalties for their work, the vast majority do not. Accordingly, mere reference to a “copyright owner” does not provide the claims with a financial purpose. *Qualtrics*, CBM2015-00164, Paper 8 at 6 (denying institution of CBM review because potential financial uses in specification were “purely exemplary”).

c. Claims 10 and 11 are not subject to CBM review because the “tracking” limitation is not limited to determining royalty payments.¹

Petitioners’ arguments regarding the “tracking” limitations of the dependent claims are equally unavailing. Claim 8’s dependent claims 10 and 11 further recite:

10. The method of claim 8, further comprising: tracking, by the computer system, the user of the cellular phone receiving the data file to determine data about the user;

¹ Petitioners present no argument relating to claim 12.

and reporting, by the computer system and to the copyright owner, the data about the user.

11. The method of claim **8**, further comprising tracking, by the computer system, the user of the cellular phone receiving the data file to determine data about the user.

Ex. 1001 at 47 (34:25-33). While the “tracking” in claims 10 and 11 could feasibly be used to determine a royalty, one theoretical use is not enough to justify institution of CBM review. *Qualtrics*, CBM2015-00164, Paper 8 at 6; *Great West Cas.*, CBM 2015-00171, Paper 10 at 12.

Tracking is a term of general applicability, and could be applied in a number of contexts unrelated to finances. The ’870 patent specification indicates that tracking function can accomplish tasks not related to finances or the exchange of money, including “allowing a record to be kept as to which music files have been downloaded and stored on the electronic device” Ex. 1001, 6:59-61. Similarly, a copyright owner could track her work for numerous non-financial reasons such as gaining insights into the popularity of her work and the demographic of her followers. An author may simply want to track her work for the knowledge that her work is well received. As discussed in Section III.b.ii., the Copyright Act grants the author exclusive rights to her work for numerous non-financial reasons. Petitioners cannot render a patent CBM eligible merely because a claim element discloses a general method to track all copyrighted work. To do so would set a precedent

rendering all patents eligible for CBM review. *Unwired Planet, LLC*, 2016 U.S.

App. LEXIS 20764 at *13 (“[I]t cannot be the case that a patent covering a method and corresponding apparatuses becomes a CBM patent because its practice could involve a potential sale of a good or service. All patents, at some level, relate to potential sale of a good or service.”).

The Board may only institute CBM review “for a patent that is a CBM patent.” *J.P. Morgan Chase*, CBM 2014-00160, Paper 11 at 5. Because claims 10 and 11 are not related to performing data processing or other operations used in the practice, administration, or management of a financial product or service, they are not CBM eligible. Petitioners point to nothing demonstrating that any language of the claims is specifically requiring financial activity. Thus, for all these reasons, the ’870 patent is not subject to CBM review and the Petition should be denied.

d. Claim 14 is not subject to CBM review because it is not directed to a financial product or service.

Petitioners’ arguments regarding claim 14 are similarly flawed. Claim 8’s dependent claim 14 further recites:

The method of claim 12, wherein each of the electronically-accessible data files comprises an identifier associated with the copyright owner.

Ex. 1001 at 47 (34:42-44). As discussed in sections III.b.ii and II.c, one theoretical use of copyrighted work to calculate royalties in the specification is not enough to

justify institution of CBM review. *Qualtrics*, CBM2015-00164, Paper 8 at 6; *Great West Cas.*, CBM 2015-00171, Paper 10 at 12. The method’s ability to provide an identifier associated with a particular copyright owner is not specific to financial activities. For example, the identifier enables the program to sort files by their authors, thus making it more efficient to locate a particular file. There are many reasons why a user might want to know the author of a copyrighted work—to find similar work she might enjoy, to learn more about the background of the work, or to simply organize the work by its author. None of these activities are financial in nature.

Because claim 14 is not related to performing data processing or other operations used in the practice, administration, or management of a financial product or service, it is not CBM eligible. Petitioners point to nothing demonstrating that any language of the claims is specifically requiring financial activity. Thus, for all these reasons, the ’870 patent is not subject to CBM review and the Petition should be denied.

e. Claims 8 and 10-14 are not subject to CBM review because they claim technological inventions.

The AIA excludes “patents for technological inventions” from CBM review. AIA § 18(d)(1); 37 C.F.R. § 42.301(a). Whether or not a patent claims a technological invention is “determined on a case-by-case basis.” 37 C.F.R. § 42.301(b). In making this determination, the Board considers “whether the claimed

subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution.” *Id.*

CBM analysis is not the same as obviousness analysis under 35 U.S.C. § 103. Rather than evaluate the claim element by element, as Petitioners do here, the claims are viewed as a whole, in context. *Old Republic Gen. Ins. Group, Inc.*, CBM2015-00184, Paper 7 at 7 (PTAB Apr. 15, 2016) (noting that petition was deficient because “Petitioner focuses on the individual components of the ’002 patent, without analyzing how each claim of the ’002 patent combines these individual components into an ordered whole”); *Google Inc. v. At Home Bondholders’ Liquidating Trust*, CBM2016-0036, Paper 12 at 8-9 (PTAB Aug. 22, 2016) (rejecting the petitioner’s arguments as “unpersuasive, because they focus on the individual features of the claims, rather than on the claims as a whole.”). Accordingly, it is not enough for Petitioners to “merely point[] out that the claimed functions and technology were independently known in the art. . . .” *Google*, CBM2016-0036, Paper 12 at 6.

The claims of the ’870 patent address at least three technological problems with technical solutions. **First**, the claims solve the problem of transmitting digital media files to a cellular phone by teaching the use of OFDM. **Second**, the claims solve the problem of distributing these digital files by way of transmitting the files to a cellular phone with a particular structure. **Third**, the claims solve the problem

of allowing a user to select a file for transmission through a computer system that includes server hardware and database. For all these reasons, the '870 patent claims a technological invention and thus CBM review should be denied.

Claim 8 discloses “a method for distributing electronic content over a cellular network to a user operating a cellular phone.” Ex. 1001 at 47 (33:40-42). In so doing, the '870 patent addresses a number of technical problems with technical solutions. For example, claim 8 identifies and solves the problem of transmitting digital media files to a cellular phone by teaching the use of OFDM. The patent explains that at the time of invention, “ringtones must be factory installed in the telephone or the delivery methods just directly interface with the Internet and require the consumer to be on line to access and download a particular mechanical ring tone.” *Id.* at 31 (1:40-44).

The '870 patent improves this task with a software based system for encoding the hardware of existing cellular phones. *Id.* (2:40-44). The cellular phone has a digital signal processor configured to receive the files transmitted by the computer system through a particular transmission scheme—OFDM. *Id.* at 47 (34:15-18). The use of OFDM provides a number of benefits, such as providing enough speed to transmit a high quality, compressed audio and/or visual file. *Id.* 16:53-54 (“The transmission method is used to provide enough speed for the data transmission.”). Other benefits of using OFDM for transmission include:

1) the modulation can be made robust to Inter-Symbol Interference (ISI) by increasing symbol size; 2) the modulation can be made robust to impulse noise by increasing symbol size; 3) for each individual sub-channel, the channel's response could be considered essentially flat, minimizing the need for channel equalization; and 4) different encoding schemes could be used for different sub-channels, for accommodating frequency-selective channel distortions.

Id. 16:65-17:6. Thus, claim 8 of the '870 patent addresses a particular technical problem—delivering a digital file to a cellular phone—with a technical solution—transmitting the file using OFDM to the cellular phone executed by a computer system.

The '870 patent also solves the technical problem of providing these digital files to a cellular phone that can receive and play them by claiming a cellular phone consists of a particular structure. This structure solves the problem of allowing the phone to play back a compressed digital audio and/or visual file. As the specification of the '870 patent notes, at the time of invention, cellular phones could “only be programmed to only play music (such as conventional MP3 type phones) or deliver ‘ring tones’ with an electronic chime or ring tone rather than an actual recorded song, human voice, or musical composition.” *Id.* 1:35-39.

The claim describes the cellular phone as including “a digital signal processor configured to receive the data file over a cellular network by orthogonal frequency-division multiplex (OFDM) modulation.” Petitioners argue that claim 8’s “digital content delivery, cellular phones, receivers, digital signal processors (DSPs), the use of OFDM for wireless data delivery, rights management and content preview techniques were all known and in the prior art.” Pet. at 37. Patent Owner does not agree with this contention. The claimed structure provides the technical solution to the technical problem of transmitting and receiving digital files. During the prosecution of the grandparent patent of the ’870 patent, the inventor submitted a declaration indicating that such a structure was implemented to permit the phone to receive and play back high quality, compressed digital audio and/or visual files. Ex. 1033. This declaration was also submitted to the examiner during the prosecution of the ’870 patent. Ex. 1082 at 11. In the declaration, the inventor explained that, in order to receive and play the transmitted files, he needed to develop a printed circuit board containing the necessary structure—essentially a wireless MP3 player. Ex. 1033 at ¶ 5. This novel circuit board was then integrated with the cellular phone to create a prototype device capable of receiving and playing the compressed files. *Id.* The inventor’s design as claimed in the ’870 patent thus addressed another technical problem, the limitations of cellular phones at the critical date, with a technical solution, a particularly configured cellular phone containing specific components.

Further, claim 8 solves the problem of allowing a user to select a file for transmission through a computer system that includes server hardware and database. Ex. 1001 at 33:5-10. Before the invention, cellular phones were pre-installed with a specific hardware to allow the user access and download a particular ringtone online. *Id.* at 31 (1:40-44). The invention, on the other hand, uses a software based system to encode the existing hardware of the cellular phone so that additional hardware is not required. *Id.* (2:40-44). *See also id.* at 47 (34:15-18) (“providing for the transmitting, ***by the computer system***, of the requested data file to the cellular phone...”)(emphasis added). This is significant because “it is especially desirable to make cellular phones as lightweight and as small as possible.” *Id.* at 31 (2:46-50).

Petitioners ignore the context of the claim as a whole, parsing each element without reference to the others. The Board has rejected this process. *Google*, CBM2016-0036, Paper 12 at 8-9 (denying institution of a CBM petition because the petitioner’s arguments “focus on the individual features of the claims, rather than on the claims as a whole”). Just as in *Old Republic*, here, Petitioners focus entirely on the individual elements of claim 8 and do not view them as a whole. *Old Republic*, CBM2015-00184, Paper 7 at 7. Here, as in *Old Republic*, “[s]uch a cursory analysis is insufficient to demonstrate that the [] patent claims, as a whole, do not recite a technological feature that is novel and unobvious.” *See also Apple, Inc. v.*

ContentGuard Holdings, Inc., CBM2015-00046, Paper 12 at 10 (PTAB June 3, 2015) (“Petitioner does not even mention the claimed subject matter as a whole, but instead merely points to discrete pieces of the claim, each taken out of context and dissected separately.”); *Emnos USA Corp. v. Dunnhumby Ltd.*, CBM2015-00116, Paper 8 at 8 (PTAB Nov. 10, 2015) (finding that “Petitioner has not met its burden with respect to the first prong of the technological invention exclusion” where “Petitioner addresses only certain elements of the claims and fails to assess any of the claims as a whole”); *Experian Mktg. Sols., Inc. v. RPost Commc’ns Ltd.*, CBM2014-00010, Paper 20 at 9 (PTAB Apr. 22, 2014) (denying institution of CBM review where the petitioner “analyzed the method steps separately, instead of examining each claim as a whole as required” and also concluding that “Petitioner’s conclusory language in the petition that none of the steps of a claim requires any novel and unobvious technological implementation, or solves a technical problem, without more, is not sufficient to demonstrate that the claimed subject matter is not a technical invention”).

Viewed as a whole and in context of the other elements, the claims of the ’870 patent present a technological invention that improves upon existing technology. It does so by solving technical problems with technical solutions—and the claims claim technological inventions. Because the Petition fails to address these novel solutions, and do not address the claims as a whole, it must be denied.

The Petition also fails to present argument as to the remaining claims of the '502 patent, which depend from the technological invention claimed in claim 8, so institution of CBM review must be denied.

IV. Claim Construction

Petitioners submit that a single claim term, “orthogonal frequency-division multiplex” or “OFDM,” requires claim construction. Petitioners propose that the use of OFDM should be construed as “not limited to use of OFDM for transmission over an audio channel,” but also include using OFDM for “transmission of files over data channels of modern digital cellular networks that employ OFDM, such as Long-Term Evolution (LTE).” Pet. 31-32.

In a CBM proceeding, claim terms are given their “broadest reasonable construction in light of the specification of the patent in which [they] appear[.]” 37 C.F.R. § 42.300(b). As claims terms are generally given their plain and ordinary meaning, Patent Owner submits that no construction of the OFDM term is necessary. For the purposes of this preliminary response, however, Patent Owner will apply Petitioners’ proposed construction solely for the purpose of determining institution.

V. Petitioners Have Not Proven That One Or More Claims Of The '870 Patent Are More Likely Than Not Unpatentable Under 35 U.S.C. § 101.

a. An inventive concept or transformation of building blocks of human ingenuity is patent eligible under Section 101.

35 U.S.C. § 101 makes eligible for patenting “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof” 35 U.S.C. § 101. Eligibility under 35 U.S.C. § 101 is subject to “an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2012). *See also Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012); *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418-419 (2007); *Park v. Booth*, 102 U.S. 96, 102 (1880). However, “[a]n invention is not rendered ineligible for patent protection simply because it involves an abstract concept.” *Alice*, 134 S. Ct. at 2354 (citing *Diamond v. Diehr*, 450 U.S. 175, 187 (1981)).

Courts must “tread carefully in construing this exclusionary principle lest it swallow all of patent law.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014). In *Alice*, the Supreme Court articulated a two-step test for determining whether or not an invention is eligible for patent protection. **First**, the Court determines “whether the claims at issue are directed to one of those patent ineligible concepts.” *Alice*, 134 S. Ct. at 2355. If the claims contain an “‘inventive concept’—

i.e., an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself,’”—the claims are eligible for patent protection. *Id.* (citing *Mayo*, 132 S. Ct. at 1294). ***Second***, if the patent is directed to a patent ineligible concept, the Court “must distinguish between patents that claim the ‘buildin[g] block[s]’ of human ingenuity and those that integrate the building blocks into something more, thereby ‘transform[ing] them into a patent-eligible invention.” *Id.* (citing *Mayo*, 132 S. Ct. at 1294).

b. A solution to a problem necessarily rooted in computer technology constitutes an inventive concept under Section 101.

While it is true that “recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible,” a solution to a problem that “is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks” is eligible for patent protection. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014). For example, claims that “address a business challenge . . . particular to the Internet” may be valid under 35 U.S.C. § 101. *Id.* On the other hand, claims that simply recite an abstract idea with “routine additional steps such as updating an activity log, requiring a request from the consumer to view the ad, restrictions on public access, and use of the Internet” are invalid under 35 U.S.C. § 101.

Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 716 (Fed. Cir. 2014).

Claims—considered in light of the specification—contemplating “a specific improvement to the way computers operate” are not an abstract idea. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016) (citing *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). For example, in *Enfish*, because the claims recited a “self-referential table for a computer database” distinct from conventional database structures, they did not claim a known, abstract idea. *Id.* at 1336.

c. The '870 patent is patent eligible because it is a solution to a problem necessarily rooted in computer technology.

Petitioners state that the concept addressed by the claims of the '870 patent is simply “selecting and obtaining content (e.g., copyright music) upon request.” Pet. at 50. This is improper and should be rejected by the Board. *Enfish*, 822 F.3d at 1337 (“describing the claims as such a high level of abstracting and untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule”).

The Federal Circuit has reiterated its position that oversimplifying the claims is inappropriate during 35 U.S.C. § 101 analysis. *See McRo, Inc. v. Bandai Namco Games Am. Inc.*, 2016 U.S. App. LEXIS 16703 at *24-25 (Sept. 13, 2016) (cautioning against “oversimplifying” the claims and holding “whether at step one or step two of the Alice test, in determining the patentability of a method, a court

must look to the claims as an ordered combination, without ignoring the requirements of the individual steps”).

As discussed above, in Sections III.e and V.c, the claims of the ’870 patent relate to specific technological improvements to the functioning of existing computer technology. The claims do not merely address selecting and obtaining content upon request. Although this is a part of the invention, it is merely a building block upon which the invention improves. Courts have long held that improving upon such a building block is not an abstract idea. *Enfish*, 822 F.3d at 1337 (citing *Diehr*, 450 U.S. at 189 (overgeneralizing claims “if carried to its extreme, make[s] all inventions unpatentable because all inventions can be reduced to underlying principles of nature which, once known, make the implementation obvious”)); *see also Mayo*, 132 S. Ct. at 1293 (“all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.”); *KSR*, 550 U.S. at 418-19 (2007) (“inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known”); *Park*, 102 U.S. at 102 (1880) (“Modern inventions very often consist merely of a new combination of old elements or devices, where nothing is or can be claimed except the new combination.”).

The invention claimed by the '870 patent allows users to receive digital audio and/or visual files on cellular phones wirelessly using the Internet. The claims do not stop there, however. The cellular phone claimed by the patent has a particular structure including a digital signal processor so that it can effectively receive and play back the digital files. Ex. 1001 at 47 (34:15-18). Further, the claims of the patent contemplate the use of OFDM to improve the transmission functionality of two computers—the cellular phone and the computer system executing the method. *Id.* Viewing the claims as a whole, it is apparent that this concrete improvement in functionality is what distinguishes the claims of the '870 patent from a brick-and-mortar record store, as well as the overly abstracted idea presented by Petitioners. Petitioners choose to ignore the claim language, and do so at their own peril. As the Federal Circuit has recognized, over-abstracting patent claims, as Petitioners do here, would cause the exceptions to 35 U.S.C. § 101 to “swallow the rule.” *Enfish* 822 F.3d at 1337. The Board must act as a check on such over-abstraction and reject the Petitioners’ arguments in this regard.

Even if the Board concludes that the claims of the '870 patent contemplate an abstract idea, law of nature, or natural phenomena, the claims still encompass an inventive concept. Because Petitioners have not demonstrated that it is more likely than not that the claims lack an inventive concept, the Petition should be denied.

The Supreme Court has examined the “inventive concept” analysis in two cases. In *Alice*, the Court determined that an abstract idea is not rendered eligible by simply stating the abstract idea and including the words “apply it” in a claim. *Alice*, 134 S. Ct. at 1358. Further, abstract ideas are not patentable by simply “limiting the use of an abstract idea to a particular technological environment.” *Id.* In other words, the *Alice* step two inquiry should be whether the additional limitations are necessary or incidental to implementing an abstract idea in a given technological environment. *Id.*

Mayo formed the basis for the *Alice* opinion and its analysis. In *Mayo*, the relevant claim was directed to the unpatentable law of nature correlating metabolites in the blood to efficacy and toxicity of drug dosages. *Mayo*, 132 S. Ct. at 1295. Of the three claimed steps, the first recited nothing more than the relevant and pre-existing audience: doctors who treat patients with the specific drug. *Id.* at 1297. Identifying a specific audience merely limited the use of the natural law to a particular environment. *See id.* (quoting *Bilski v. Kappos*, 561 U.S. 593, 601 (2010)). The second step simply informed the doctors of the relevant natural correlations. *Id.* And the third step instructed doctors to determine the level of relevant metabolites using existing methods “well known in the art.” *Id.* at 1297-98 (citing the patent specification). All told, “the three steps simply t[old] doctors to gather data from which they may draw an inference in light of the correlations.” *Id.*

at 1298. And in practice “[a]nyone who wants to make use of [the correlations] must first administer [the] drug and measure the resulting ... concentrations....” *Id.* (emphasis added). Thus the combination amounted to “nothing significantly more than an instruction to doctors to apply the applicable laws when treating their patients.” *Id.*

The Federal Circuit recently provided additional guidance regarding the inventive concept analysis in *BASCOM v. AT&T*. First, the Court determined that the claims at issue were directed to the abstract idea of “filtering content.” *BASCOM Global Internet Servs. v. AT&T Mobility LLC*, 827 F.3d 1341, 1348 (Fed. Cir. June 27, 2016). Nevertheless, the Court found the claims to be patent eligible as teaching an inventive concept. *Id.* at 1352. The Court ruled that an inventive concept may result from “one or more of the individual claim limitations or in the ordered combination of the limitations.” *Id.* at 1349. While recognizing that it has become common practice for a § 101 inquiry to consider whether various claim elements simply recite “well-understood, routine, conventional activities,” the district court erred in analyzing the claims as if it were performing an obviousness analysis under 35 U.S.C. § 103. *Id.* at 1350. Rather, the Court held that “[t]he inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art.” *Id.* The inventive concept can instead be “found in

the non-conventional and non-generic arrangement of known, conventional pieces.”
Id. at 1346.

Thus, even though “filtering content” was known in the art, BASCOM’s patent arranged the known, existing elements in a manner which imparted benefits over conventional filtering. *Id.* at 1352. Thus, the claims were “more than a drafting effort designed to monopolize the abstract idea”—they improved an existing technological process. *Id.* (quotations omitted). Thus, the claims “transform[ed] the abstract idea of filtering content into a particular, practical application of that abstract idea.” *Id.*

Petitioners allege that the ’870 patent merely claims the abstract idea of selecting and obtaining content upon request. Pet. at 50. Petitioners are incorrect, and the claims are not directed at this over-abstracted concept. *See* Section V.c. Regardless, even if the claims are directed to that abstract concept, as in *BASCOM*, the claims present a particular, practical application of the concept that improves upon that concept in an inventive manner. Here, the patent claims improve upon the delivery of digital files through a computer system with server hardware and database, to a cellular phone containing specially configured digital signal processor by using OFDM as the transmission means. Ex. 1001 at 47 (33:40-34:4).

Indeed, the ’870 patent’s specification is clear on the benefits of utilizing OFDM over other transmission methods: 1) the modulation can be made robust to

Inter-Symbol Interference (ISI) by increasing symbol size; 2) the modulation can be made robust to impulse noise by increasing symbol size; 3) for each individual sub-channel, the channel's response could be considered essentially flat, minimizing the need for channel equalization; and 4) different encoding schemes could be used for different sub-channels, for accommodating frequency-selective channel distortions. *Id.* 16:65-17:6. Thus, as in *BASCOM*, the '870 patent takes the abstract idea of delivering audio or video upon request and transforms it into a practical application of the concept that improves upon means of transmission. This inventive concept makes the claims eligible for patent protection.

Both *Alice* and *Mayo* are distinguishable from this case. Unlike the claims in *Alice*, the '870 patent does not restate the abstract idea of selecting and obtaining content upon request and simply “apply it” to the Internet. Rather, improving upon existing transmission methods for this purpose, the '870 patent specifically calls for the use of OFDM to deliver a file to a cell phone with a particular structure. The claims are also unlike those in *Mayo*, where they were “nothing significantly more than an instruction to doctors to apply the applicable laws when treating their patients.” *Mayo*, 132 S. Ct. at 1298. Here, the claims recite more than just selecting and obtaining content upon request—the claims contemplate the use of OFDM specifically to transfer the files. Thus, the patent is not merely instructing the reader to apply a law of nature or abstract idea. Instead, it teaches the reader to accomplish

the delivery through a particular, innovative means with tangible improvements over other transmission schemes. Like *BASCOM*, the claims are therefore eligible for patent protection.

Petitioners make the same mistake as the lower court in *BASCOM*, treating the 35 U.S.C. § 101 analysis as if it were an obviousness analysis under 35 U.S.C. § 103. By focusing on each element individually, and not viewing the claims as a whole, Petitioners fail to meet their burden and demonstrate that at least one of the '870 patent's claims are invalid. *BASCOM*, 827 F.3d at 1350 (“The inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art.”). Rather, “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” *Id.* at 1350. Indeed, the Petition does nothing more than assert, incorrectly, that each claim element was known in the art. This deficiency is fatal to Petitioners' 35 U.S.C. § 101 argument. Accordingly, the Board should reject the Petition on this ground.

Finally, underlying the 35 U.S.C. § 101 analysis is a concern that the claims of a patent will preempt a law of nature. *Alice*, 134 S. Ct. at 2354. This is not a concern in this case. Notably, Petitioners do not assert invalidity on the grounds of obviousness in their Petition. Petitioners argue for a broadly defined abstract idea in the *Alice* step one analysis—selecting and obtaining content upon request. Pet. at

50. The '870 patent does not preempt this broad concept. The claims of the patent are directed to a particular delivery method—using OFDM—according to a particular procedure to a particular cellular device—consisting of a computer with a server hardware and database. Ex. 1001 at 47 (33:40-44). These particularized claims do not preempt the entire field of wireless delivery of digital audio and/or visual content. For example, as the claims are limited to transmission by way of OFDM, any alternative transmission mechanism may be used for the delivery. This lack of preemption provides additional assurances that the '870 patent does not implicate patent-ineligible subject matter. *See McRo*, 2016 U.S. App. LEXIS 16703 at 27 (“The preemption concern arises when the claims are not directed to a specific invention and instead improperly monopolize ‘the basic tools of scientific and technological works.’” (citing *Alice*, 134 S. Ct. at 2354)).

For all these reasons, Petitioners have failed to demonstrate that, more likely than not, any of the claims of the '502 patent are invalid for lack of patentable subject matter. Accordingly, the Board should reject the Petition's 35 U.S.C. § 101 arguments.

VI. Petitioners Have Not Proven That One Or More Claims Of The '870 Patent Are More Likely Than Not Unpatentable Under 35 U.S.C. § 112.

At the institution stage, Petitioners bear the burden of demonstrating that “it is more likely than not that at least 1 of the claims challenged in the petition is

unpatentable. 35 U.S.C. § 324(a). If the Petitioners do not meet this threshold, the Board may not institute CBM review. *Id.*

35 U.S.C. § 112 sets forth the disclosure and description requirements for a patent. Petitioners argue that the claims of the '870 patent are invalid under 35 U.S.C. § 112 for two reasons. First, Petitioners claim that the '870 patent fails to comply with the “regards as” clause found in 35 U.S.C. § 112(b) (formerly 35 U.S.C. § 112 ¶ 2), which states that the specification must “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or joint inventor regards as the invention.” 35 U.S.C. § 112(b). Next, Petitioners argue that the '870 patent does not comply with the written description provision of 35 U.S.C. § 112(a) (formerly 112 ¶ 1), which requires that “[t]he specification shall contain a written description of the invention” Because the Petitioners have failed to prove either provision will “more likely than not” render at least one of the '870 patent’s claims unpatentable, the Petition must be denied.

a. The '870 patent complies with the “regards as” clause.

To comply with 35 U.S.C. § 112(b), a claim “must set forth what ‘the applicant regards as his invention.’” *Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1377 (Fed. Cir. 2000). The “regards as” requirement of 35 U.S.C. § 112 has roots dating back to the United States Court of Customs and Patent Appeals. *See, In*

re Conley, 490 F.2d 972, 976 (CCPA 1974) (“Occasionally, the first sentence of the second paragraph of § 112 has been relied upon as a basis for rejection of the claim, not because of “indefiniteness” of the claim language but because the language used did not particularly point out and distinctly claim the subject matter which the applicant regards as his invention.”). *See generally, In re Prater*, 415 F.2d 1392 (CCPA 1969); *In re Cormany*, 476 F.2d 998 (CCPA 1973). The “regards as” clause rarely arises in appellate jurisprudence because, as *Conley* recognized, the “regards as” clause is “relied upon in cases where some material submitted by the applicant, other than his specification, shows that a claim does not correspond in scope with what he regards as his invention.” *Conley*, 490 F.2d at 976.

Recently, however, the Federal Circuit issued its *Ancora* opinion and provided additional analysis of the “regards as” clause. *Ancora Techs. v. Apple, Inc.*, 744 F.3d 732 (Fed. Cir. 2014). In *Ancora*, Apple asserted that the specification defined the terms “volatile memory” and “non-volatile memory” in a way that was contrary to their plain and ordinary meaning, as the terms were used in the claims. *Id.* at 734, 739. The Federal Circuit disagreed. *Id.* at 739. The Court noted that there was no dispute that the claim terms “have a meaning that is clear, settled, and objective in content.” *Id.* at 737. Thus, there was no facial ambiguity or obscurity in the claim term. *Id.* at 738. Because *Ancora* “embrac[ed] the claim language’s clear, ordinary meaning,” the Court concluded that the “oddly phrased” specification

language and prosecution history did not “establish that the applicants regarded their invention as something contrary to that meaning.” *Id.* 738, 739. Accordingly, the Federal Circuit rejected Apple’s “regards as” challenge. *Id.* at 739.

The situation in this case is similar to that in *Ancora*. Claim 8 of the ’870 patent plainly states that the cellular phone is “configured for receiving and processing files transmitted by orthogonal frequency-division multiplex modulation [OFDM]” Ex. 1001 at 47 (34:15-18). From the claims, it is apparent that no limitations, regarding the data channel, audio channel, or otherwise, are placed on the plain and ordinary meaning of OFDM. Indeed, Petitioners admit in their construction that the use of OFDM encompasses both the audio and data channels. Pet. at 46-50. For the purpose of this institution decision, Patent Owner does not dispute this meaning. *See* Section IV. Thus, like *Ancora*, Petitioners have not established that the inventors regarded the invention as contrary to that meaning.

Petitioners only cite to a single modern case where the “regards as” clause was used to invalidate a claim—*Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336 (Fed. Cir. 2002). In *Allen Eng’g*, due to an apparent drafting error in the claims, the phrase “perpendicular” was used instead of “parallel.” *Allen Eng’g*, 299 F.3d at 1349. Allen, the patent owner, admitted that the use of “perpendicular” was incorrect and argued that the Court should construe the term as “parallel.” *Id.* The Court refused to do so, despite characterizing the error as “schematic

indefiniteness.” *Id.* Because the claims plainly contradicted the specification, and the patent owner admitted the contradiction, the Court found that the inventor did not regard the perpendicular pivoting gear box described in the claims as his invention. *Id.*

The case at hand is distinguishable from *Allen Eng’g* for the same reasons *Ancora* was distinguishable. In *Ancora*, the Federal Circuit distinguished *Allen Eng’g* because “*Ancora* embraces the claim language’s clear, ordinary meaning.” *Ancora*, 744 F.3d at 739. This was in stark contrast to *Allen Eng’g*, “where the patentee agreed that the claim language did not match what he regarded as his invention, as the intrinsic record unambiguously showed. . . .” *Id.* Unsurprisingly, in *Allen Eng’g*, the “court denied the patentee’s request to reject the claim’s clear, ordinary meaning.” *Id.* The same rationale applies to this case. Here, there is no “schematic indefiniteness” or plain error that exists in the claims. Nor is Patent Owner asking the Board to reject the plain meaning of the claims. Instead, Patent Owner embraces that meaning for the purposes of this institution decision. Just as in *Ancora*, the Board should reject Petitioners’ “regards as” argument.

Petitioners also point to statements made by one of the ’870 patent’s inventors during the prosecution of the ’870 patent’s grandparent patent to support their argument. Dr. Robert Freidson, one of the inventors of the ’870 patent and its parent patent, submitted a declaration describing the prototype device he designed

as part of the inventive process. Ex. 1079. As part of that declaration, Dr. Freidson listed a number of exemplary aspects of the invention. *Id.* ¶ 7. One of these examples utilized OFDM to transmit data over the audio channel of a cellular phone. *Id.* Another example described the delivery of a rich media file over the data channel of a wireless phone without using OFDM. *Id.*

Dr. Freidson's statements were not meant to limit the scope of the patent's claims, nor were they intended to provide an exhaustive list of embodiments. Dr. Freidson was clear that he was discussing two possible aspects, out of many, encompassed by the invention:

In one aspect, my inventive method employed OFDM teachings as a method for data transmission over an audio channel of a wireless cell phone. In another aspect, I have developed a method for rich media delivery over a data channel of a wireless cell phone that doesn't employ OFDM.

Id. (emphasis added). Dr. Freidson was describing the invention broadly with reference to two possible applications. In the first, Dr. Freidson describes wireless delivery to a "wireless cell phone" using the "audio channel" of that phone "employ[ing] OFDM." In the other described aspect, Dr. Freidson explains that he also developed the technology to transmit rich media "over the data channel," including to a "wireless cell phone" that "doesn't employ OFDM." Petitioners do not cite to any evidence from the declaration indicating that Dr. Freidson intended

these examples to be limiting in any way, or that the examples exhaustively described the invention. Because the examples are not limiting, the distinctions between the two examples serve to highlight the scope of the invention, not limit it to particular uses on particular channels.

Petitioners also argue that a single statement in the specification provides evidence that the inventor did not regard the use of OFDM on the data channel as part of the invention. This argument is also flawed. As in Dr. Freidson's declaration, the patent's specification provides a number of non-limiting examples as to the implementation of the claimed invention. One such implementation describes both the use of OFDM and the use of the audio channel of the phone. Ex. 1001, 16:63-64. Another example describes transmission by way of the data channel. *Id.* 19:55-65. This example also notes that the use of OFDM is not "required" for this particular implementation. *Id.* 19:61. Nothing in this language is limiting, however, nor does it suggest that the inventors did not consider the use of OFDM in transmission over the data channel. The statement is much more straightforward—while OFDM may be used for transmission over the data channel, it is not required in the particular embodiment detailed in the specification. The inventors had already detailed the use of OFDM in a prior embodiment. That the specification indicated that OFDM was not "required" for the data channel embodiment is not an indication that the inventors did not contemplate its use as

part of their invention. If anything, the statement demonstrates that the inventors were aware that OFDM could be used over the data channel, but did not want to limit their invention only to its use.

In sum, Petitioners have failed to provide any evidence, let alone demonstrated that it is more likely than not, that the inventors of the '870 patent intended to place any limitation on the use of OFDM in claim 8. For this reason, Petitioners arguments relating to the “regards as” clause of 35 U.S.C. § 112(b) also fail.

b. The '870 patent complies with the written description requirement.

Petitioners also failed to prove that the claims of the '870 patent are more likely than not to fail to comply with the written description requirement. 35 U.S.C. § 112 also states that “the specification shall contain a written description of the invention” 35 U.S.C. § 112(a) (formerly 35 U.S.C. § 112 paragraph 1). The written description requirement is satisfied when the specification “conveys to those skilled in the art that the inventor had possession of the claimed subject matter of the filing date.” *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). To answer this question, the Board performs an “objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art.” *Id.* In doing so, information that was “well-known in the art” can be

inferred in addition to what is disclosed in the specification. *Boston Sci. Corp. v. Johnson & Johnson*, 647 F.3d 1333, 1366 (Fed. Cir. 2011).

“[T]he hallmark of written description is disclosure.” *Ariad*, 598 F.3d at 1351. The amount of disclosure “required to satisfy the written description requirement depends, in large part, on the nature of the claims and the complexity of the technology.” *Streck, Inc. v. Research & Diagnostic Sys.*, 665 F.3d 1269 (Fed. Cir. 2012). In any case, “there is no requirement that the disclosure contain either examples or an actual reduction to practice.” *Alcon Research Ltd. v. Barr Labs., Inc.*, 745 F.3d 1180, 1190 (Fed. Cir. 2014). In other words, the written description requirement “is about whether the skilled reader of the patent disclosure can recognize that what was claimed corresponds to what was described; it is not about whether the patentee has proven to the skilled reader that the invention works, or how to make it work” *Id.* at 1191. The relevant inquiry is whether disclosure allows “one skilled in the art to visualize or recognize the identity of the subject matter purportedly described. *Enzo Biochem, Inc. v. Gen-Probe Inc.*, 323 F.3d 956, 968 (Fed. Cir. 2002). *See also, LizardTech, Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1345 (Fed. Cir. 2005) (“the patent specification is written for a person of skill in the art, and such a person comes to the patent with the knowledge of what has come before . . . it is unnecessary to spell out every detail of the

invention in the specification; only enough must be included to convince a person of skill in the art that the inventor possessed the invention”).

The '870 patent teaches an innovative method for wirelessly delivering digital audio and/or visual files from a server to a cellular phone with a particular structure. Ex. 1001, 33:2-4. First, the digital files are stored in a library on a server and a representation of the library is sent to the cellular phone. *Id.* 33:5-10. Then, the user of the cellular phone selects and requests a particular file from the library. *Id.* 33:11-13. The server then transmits the requested file to the cellular phone “by orthogonal frequency-division multiplex modulation” also known as OFDM. *Id.* 33:14-20. The use of OFDM is described in detail by the specification of the patent. *Id.* 16:63-17:59.

Petitioners’ argument that the specification does not describe the use of OFDM on the data channel is flawed. The patent’s specification provides a number of non-limiting examples as to the implementation of the claimed invention. One such implementation describes both the use of OFDM and the use of the audio channel of the phone. Ex. 1001, 16:63-64. Another example describes transmission by way of the data channel. *Id.* 19:55-65. Petitioners claim that the specification excludes the use of OFDM over the data channel because, in regards to this embodiment, the specification notes that the use of OFDM is not “required.” *Id.* 19:61. This single statement from the specification is not enough to disclaim the use

of OFDM generally, over the audio channel or the data channel. *See Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Nor does it change the plain, unlimited meaning of using OFDM. *Id.* (“the patentee must ‘clearly express an intent’ to redefine the term”). For these reasons, Petitioners’ arguments fail.

Petitioners rely on *ICU Med. Inc. v. Alaris Med. Sys.*, to support their written description arguments. In *ICU Medical*, the patents-in-suit related to medical valves used in transmitting fluids to medical patients through IV. *ICU Med., Inc. v. Alaris Med. Sys.*, 558 F.3d 1368, 1372 (Fed. Cir. 2009). The asserted claims included a set of claims describing the valve with a spike used to puncture the valve’s seal. *Id.* at 1374. In another set of asserted claims, the inclusion of a spike was optional. *Id.* at 1372. The parties’ written description arguments focused on this latter set of claims. *Id.* at 1377. Because these claims “[did] not include a spike limitation” they were “broader” than the asserted spike claims. *Id.* at 1378. The Court concluded that these spike-optional claims were not adequately described because “the specification describes only medical valves with spikes.” *Id.* Indeed, ICU “failed to point to any disclosure in the patent specification that describes a spikeless valve” *Id.* at 1379. For these reasons, the Court held that the spike-optional claims were invalid. *Id.*

ICU Medical is distinguishable from the present case. In *ICU Medical*, the patents-in-suit included claims for an embodiment with an element that was wholly undescribed in the specification of the patents—a spikeless valve. *Id.* at 1378. Because the specification only addressed “medical valves with spikes,” the broader, spike optional claims were undescribed. *Id.* Here, claim 1 specifically claims the transmission of digital audio and/or visual files “by orthogonal frequency-division multiplex modulation.” Ex. 1001, 33:18-21. The use of OFDM is described in detail in one exemplary embodiment. *See, e.g., id.* 16:63 (“An orthogonal frequency-division multiplex (OFDM) modulation scheme is used for data transmission.”); *id.* 17:23-59 (describing implementation of OFDM). This is in stark contrast to *ICU Medical*, where a spikeless valve was never described in the specification. Additionally, although the use of OFDM is not explicitly implemented in data channel example in the specification, this is insufficient to invalidate the claims. At best, Petitioners can argue that the specification does not “require” the use of OFDM, but does not prohibit it. Pet. at 48. *ICU Medical*’s holding is not applicable in this case.

Nor does Petitioners’ reliance on *Bamberg v. Dalvey* save the Petition. In *Bamberg*, the claims of the asserted patent were construed to contain a “white layer that melts above and below 220°C.” *Bamberg v. Dalvey*, 815 F.3d 793 (Fed. Cir 2016). The specification, however, stated that a melting white layer was

“undesirable.” *Id.* at 798. Because Bamberg “specifically distinguished white layers that melt below 220°C as producing an ‘undesired’ result,” the claims were not adequately described. *Id.* Here, no such distinction was made. Petitioners allege that the specification states that the use of OFDM was not required in conjunction with transmission over the data channel. Pet. at 61-62. This is not the same as saying the use of OFDM is undesirable. Rather, it simply means that the particular embodiment could be, but is not necessarily, implemented without OFDM.

Bamberg, like *ICU Medical*, is inapplicable to the present case.

It is Petitioners’ burden to prove that one or more of the claims of the patent are more likely than not unpatentable. 35 U.S.C. § 324(a). Here, Petitioners have failed to meet their burden with regards to written description. The ’870 patent’s specification details the use of OFDM in data transmission. The mere fact that some of the examples disclosed do not require, but may include, the use of OFDM does not create a written description issue. Indeed, Petitioners admit that, without additional limitations, the use of OFDM is properly interpreted as encompassing transmission over both the audio and data channels. *See* Pet. at 34. Petitioners’ arguments are nothing more than an attempt to manufacture a description deficiency where none exists. Such an argument does not prove that the claims of the ’870 patent are “more likely than not” unpatentable. For these reasons, the written

description requirement of 35 U.S.C. § 112 does not provide a basis for institution of CBM review.

VII. Conclusion

For the reasons stated above, the '870 patent does not “claim a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service,” and thus is not eligible for CBM review. A.I.A. § 18(d)(1). For this reason alone, the Petition should be denied. Nevertheless, if the Board determines that the claims of the '870 patent meet this threshold, Petitioners have failed to demonstrate that one or more claims of the '870 patent are more likely than not to be found unpatentable, on either 35 U.S.C. § 101 or 35 U.S.C. § 112 grounds. Because Petitioners have not met their burden, the Petition should be denied and CBM proceedings should not be instituted.

Dated: January 20, 2017

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATION

I hereby certify that the above Patent Owner's Preliminary Response consists of 11,685 words in 14 point Times New Roman as calculated by the word count feature Microsoft Office 2010, in compliance with 37 C.F.R. § 42.24(a)(iii) and (b)(1). This word count is inclusive of all text and footnotes but not including a table of contents, a table of authorities, mandatory notices under § 42.8, a certificate of service or word count, or appendix of exhibits or claim listing.

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CERTIFICATE OF SERVICE

I hereby certify that on this January 20, 2017, a copy of Patent Owner's Preliminary Response has been served in their entirety by electronic mail to

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