

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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FACEBOOK, INC.,  
Petitioner,

v.

TLI COMMUNICATIONS LLC,  
Patent Owner.

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Case IPR2014-00566  
Patent 6,038,295

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Before JAMESON LEE, BART A. GERSTENBLITH, and  
JO-ANNE M. KOKOSKI, *Administrative Patent Judges*.

KOKOSKI, *Administrative Patent Judge*.

DECISION  
Denying Institution of *Inter Partes* Review  
37 C.F.R. § 42.108

## I. INTRODUCTION

Facebook, Inc. (“Petitioner”) filed a Petition (“Pet.”) to institute an *inter partes* review of claims 1, 2, 6–11, 14–17, and 21–24 of U.S. Patent No. 6,038,295 (“the ’295 patent,” Ex. 1001). Paper 1. Patent Owner TLI Communications LLC (“Patent Owner”) filed a Preliminary Response on July 9, 2014. Paper 13 (“Prelim. Resp.”). We have jurisdiction under 35 U.S.C. § 314.

Upon consideration of the Petition and Preliminary Response, we determine that Petitioner has not established a reasonable likelihood of prevailing with respect to any of the challenged claims of the ’295 patent. Accordingly, we deny the Petition, and decline to institute *inter partes* review.

### A. *Related Proceedings*

Petitioner indicates that the ’295 patent is involved in a district court infringement action, in which it is a party, titled *TLI Communications LLC v. AV Automotive, L.L.C.*, Case No. 14-cv-0142 TSE (E.D. Va.). Pet. 1. Petitioner also indicates that there are sixteen other pending cases involving the ’295 patent. *Id.*

### B. *The ’295 Patent (Ex. 1001)*

The ’295 patent, titled “Apparatus and Method for Recording, Communicating and Administering Digital Images,” is directed to an apparatus and method that “simplif[y] transmission of digital images which have been recorded, optimiz[e] the communication of the image data[,] and provid[e] a method for administering the storage of the digital images, which is simple, fast and surveyable so that the digital images may be archived.” Ex. 1001, 1:66–2:4.

The '295 patent describes a communication system that includes “an arbitrary number of telephone units TE, a server S, and a transmission system US that is coupled to the telephone units TE as well as to the server S and that is used for transmitting data between the telephone units and the server S.” *Id.* at 4:62–67. Figure 1 of the '295 patent is reproduced below:

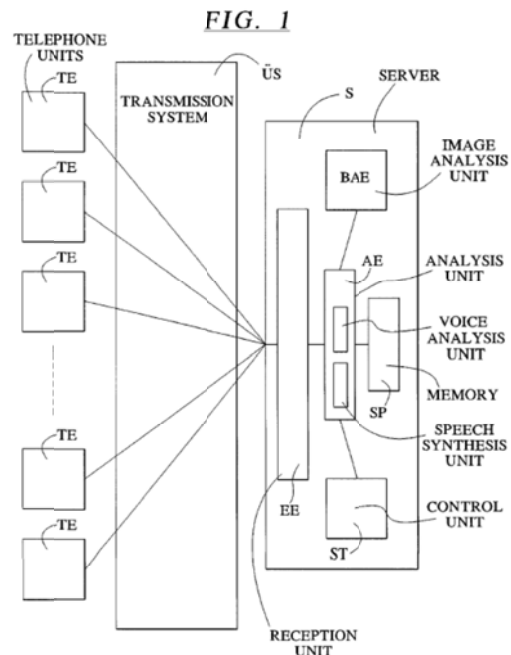


Figure 1 depicts a block diagram of an embodiment of the '295 patent's communication system.

The server “is a computer system which serves for organizing a database which includes a large number of digital images as well as classification information OM which may potentially be allocated to the digital images.” *Id.* at 5:1–4. The server includes a number of components, including receiving unit EE that receives data sent from telephone unit TE, analysis unit AE that is coupled to receiving unit EE and extracts the classification information from the data, and memory SP for storing the data and digital images. *Id.* at 5:5–13.

Figure 2 of the '295 patent is reproduced below:

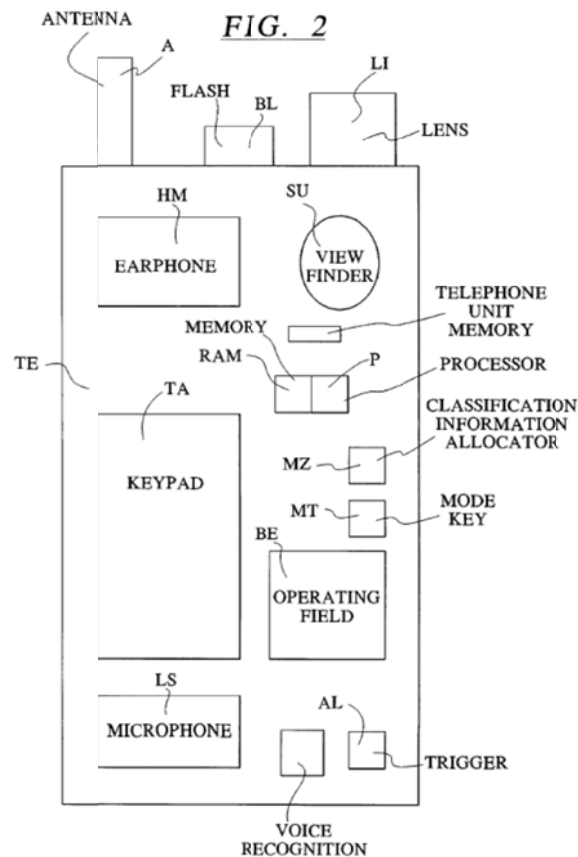


Figure 2 depicts a plan view of telephone unit TE used in an embodiment of the '295 patent's communication system. In addition to standard features such as keypad TA, earphone HM, and microphone LS, "[t]he telephone unit also includes a digital image pick up unit for recording images." *Id.* at 5:58–59. The '295 patent states that "a means MZ is provided in the telephone unit TE for allocating classification information OM which are prescribed by the user to the digital images." *Id.* at 6:42–45. The '295 patent further states that, "[i]n terms of its function, the allocation means MZ may be integrated into the keypad TA, for example, by using key combinations." *Id.* at 6:45–47. Telephone unit TE may be operated via a telephone line, or wirelessly as a mobile telephone. *Id.* at 6:36–39.

*C. Illustrative Claims*

Petitioner challenges claims 1, 2, 6–11, 14–17, and 21–24 of the '295 patent. Claims 1 and 17 are independent claims, and read as follows:

1. A communication system for recording and administering digital images, comprising:

at least one telephone unit including:

a telephone portion for making [a] telephone call,

a digital pick up unit for recording images,

a memory for storing digital images recorded by the digital image pick up unit,

means for allocating classification information prescribed by a user of said at least one telephone unit to characterize digital images obtained by said digital pick up unit,

a processor for processing the digital images recorded by the digital image pick up unit;

a server including the following components:

a receiving unit for receiving data sent from said at least one telephone unit,

an analysis unit for analyzing the data received by the receiving unit from the telephone unit,

the data including classification information to characterize the digital images,

a memory in which at least the digital images are archived, the archiving taken into consideration the classifying information; and

a transmission system coupled to said at least one telephone unit and to the said server to provide for transmission of data from said at least one telephone unit and to the said server, the data including at least the digital images recorded by the digital image pick up unit and classification information.

17. A method for recording and administering digital images, comprising the steps of:

recording images using a digital pick up unit in a telephone unit,

storing the images recorded by the digital pick up unit in a digital form as digital images,

transmitting data including at least the digital images and classification information to a server, wherein said classification information is prescribable by a user of the telephone unit for allocation to the digital images,

receiving the data by the server,

extracting classification information which characterizes the digital images from the received data, and

storing the digital images in the server, said step of storing taking into consideration the classification information.

*D. The Prior Art*

Petitioner relies on the following prior art references:

Burgess, et al., U.S. Patent No. 5,115,326, issued May 19, 1992 (“Burgess,” Ex. 1006).

Witek, U.S. Patent No. 5,461,488, issued Oct. 24, 1995 (“Witek,” Ex. 1004).

Hassan, et al., U.S. Patent No. 5,550,646, issued Aug. 27, 1996 (“Hassan,” Ex. 1003).

Murphy, U.S. Patent No. 7,898,675 B1, issued Mar. 1, 2011 (“Murphy,” Ex. 1005).

Butler et al., *Network Working Group, Request for Comments (RFC) 937* (Feb. 1985) (“RFC 937,” Ex. 1009).

Gerald V. Quinn, *The Fax Handbook* 1–18, 61–69 (1989) (“Quinn,” Ex. 1008).

Joe Campbell, *C Programmer’s Guide to Serial Communications* 135–180, 335–404 (2nd ed. 1993) (“Campbell,” Ex. 1007).

*E. The Asserted Grounds of Unpatentability*

Petitioner challenges the patentability of claims 1, 2, 6–11, 14–17, and 21–24 of the '295 patent on the following grounds:<sup>1</sup>

References	Basis	Claim(s) Challenged
Hassan and Witek	§ 103(a)	1, 2, 6, 9, 17, 21, 24
Hassan, Witek, and Murphy	§ 103(a)	14
Hassan, Witek, and Quinn	§ 103(a)	7, 22
Hassan, Witek, and Campbell	§ 103(a)	10, 11, 15, 16
Hassan, Witek, Burgess, and RFC 937	§ 103(a)	8, 23

## II. ANALYSIS

*A. Claim Interpretation*

The Board interprets claims of an unexpired patent using the “broadest reasonable construction in light of the specification of the patent in which [the claims] appear[.]” 37 C.F.R. § 42.100(b); *see* Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2002). For purposes of this Decision, based on the record before us, we interpret the claim terms “classification information” (claims 1, 6–8, 17, and 21–24) and “means for allocating classification information” (claim 1).

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<sup>1</sup> Petitioner supports its challenge with a declaration executed by William H. Beckmann, Ph.D. on March 27, 2014 (Ex. 1002).

1. “*classification information*”

Petitioner argues that the term “classification information” should be interpreted to mean “information that characterizes or is otherwise associated with a digital image.” Pet. 13. As support for this interpretation, Petitioner states that the ’295 patent specification “uses the word ‘characterize’ thirteen (13) times in describing classification information,” and “provides several examples of ‘classification information’ such as” the address or telephone number of the telephone unit transmitting the data, the telephone number of the server receiving the data, and the time the digital image was taken. *Id.* at 12–13. Patent Owner agrees that “the claimed ‘classification information’ need not have a particular relationship to the content of a digital image” and “it could fairly be construed” as Petitioner proposes. Prelim. Resp. 19–20. Patent Owner notes, however, the claims of the ’295 patent also require that the “classification information” be prescribable by a user, and be used by the server to store the digital images. *Id.* at 20.

Based on the record before us, we are persuaded that Petitioner’s proposed interpretation is the broadest reasonable interpretation. Further, Petitioner’s proposed interpretation is consistent with the ’295 patent specification, which states that the classification information “characterize[s] the digital images” and “identif[ies] the digital images.” Ex. 1001, 2:32–34, 40–41, 3:18–19.

Therefore, for purposes of this Decision, we interpret “classification information” as “information that characterizes or is otherwise associated with a digital image.”



2. “means for allocating classification information”

We agree with Petitioner and Patent Owner that “means for allocating classification information” is a means-plus-function limitation invoking 35 U.S.C. § 112, ¶ 6 (now re-codified as 35 U.S.C. § 112(f)) because (1) the limitation uses the phrase “means for”; (2) the term “means for” is modified by functional language; and (3) the term “means for” is not modified by any structure recited in the claim to perform the claimed function. Construing means-plus-function claim language is a two-step process: (1) “define the particular function of the claim limitation”; and (2) “look to the specification and identify the corresponding structure for that function” where the “structure disclosed in the specification is corresponding structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” *Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1333–34 (Fed. Cir. 2004) (internal quotations and citations omitted).

Except for a narrow exception concerning generic functions performed by a general-purpose computer, such as “processing,” “receiving,” and “storing,” a computer-implemented means-plus-function element is indefinite unless the specification discloses the specific algorithm used by the computer to perform the recited function. *Function Media, LLC v. Google, Inc.*, 708 F.3d 1310, 1318 (Fed. Cir. 2013); *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1367 (Fed. Cir. 2008); *Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). Therefore, the specification must disclose enough of a specific algorithm to provide the necessary structure under § 112, ¶ 6. “The point of the requirement that the patentee disclose particular structure in the specification

and that the scope of the patent claims be limited to that structure and its equivalents is to avoid pure functional claiming.” *Aristocrat*, 521 F.3d at 1333.

On this record, we determine that the function of the claim limitation is “allocating classification information.” Petitioner states that “the ’295 specification does not appear to disclose any physical structure for performing” the function of allocating classification information. Pet. 13. Petitioner contends that, although “Figure 2 shows a telephone unit with a box ‘MZ’ labeled ‘classification information allocator,’” there is no explanation of its operation. *Id.* at 14. Petitioner further states that, “[b]ecause the specification does not disclose any algorithm for performing the allocating function,” Petitioner “has not proposed one for inclusion in the corresponding structure.” *Id.* (citing Ex. 1002 ¶ 84). Instead, Petitioner proposes that “the corresponding structure should be construed as ‘MZ,’ e.g., hardware and/or software for performing the allocating function recited in the claim.” *Id.*

Patent Owner argues that “the corresponding structure for ‘allocating classification information prescribed by a user’ is at least the phone’s keypad, controls, display, microphone and/or speech recognition unit.” Prelim. Resp. 24. Patent Owner further contends that the ’295 patent “explains that the phone’s functions may be controlled via the operating field BE depicted in Figure 2, that the operating field BE can also operate as the phone’s display, and that the operating field BE may be integrated into the phone’s keypad TA and/or be integrated with other phone controls.” *Id.* at 23 (citing Ex. 1001, 6:24–35).

Based on our review of the '295 patent, the allocation of classification information is discussed with respect to Figure 2. The '295 patent states:

In the illustrated embodiment, a means MZ is provided in the telephone unit TE for allocating the classification information OM which are prescribed by the user to the digital images and thus characterizing the digital images. In terms of its function, the allocation means MZ may be integrated into the keypad TA, for example, by using key combinations. The telephone unit TE also includes a speech recognition unit which converts open speech into text. The text can then be allocated to the digital images and transferred with the digital image data.

Ex. 1001, 6:42–51. Thus, the '295 patent identifies “a means MZ” in Figure 2 that “allocates classification information” and “may be integrated into the keypad,” but does not describe *how* the classification information is allocated to the digital image.

Other references to allocating classification information in the '295 patent also do not describe *how* the classification information is allocated to a digital image. For example, the '295 patent describes the user prescribing the classification information using a telephone unit, but does not describe that information subsequently being allocated to the digital image:

The classification information OM may be prescribed by a user of the telephone unit TE, for example, by simply speaking the information into the microphone LS of the telephone unit TE or by inputting a character sequence into the key pad TA.

Ex. 1001, 8:6–10. Similarly, the '295 patent describes that “classification information OM which are unambiguously allocated to the digital images serve to characterize the digital images” (*id.* at 6:53–55), and that “additional information about the recorded image may be attached at the time of the image acquisition directly by the individual implementing the recording of

the image” (*id.* at 3:22–25), but does not describe *how* the information is allocated or attached to the images.

The remainder of the ’295 patent does not provide any further detail with respect to the “allocating” of classification information to the digital images. The patent merely uses the word “allocate,” which may correspond to the function of the claimed “means for allocating,” but does not serve to describe an algorithm by which the classification information are “allocated.” Although the ’295 patent describes the use of a keypad or speech recognition unit by a user to prescribe classification information, it does not go on to provide an algorithm that may correspond to the claimed function of “allocating classification information prescribed by a user . . . to characterize digital images.”

We find that the ’295 patent does not describe an algorithm for “allocating classification information” as recited in claim 1. We are mindful that describing an algorithm to the satisfaction of one of ordinary skill in the art does not require, for example, detailed disclosure in a step-by-step flowchart. *See, e.g., Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1340 (Fed. Cir. 2008) (“the patent must disclose . . . enough of an algorithm to provide the necessary structure under § 112, ¶ 6,” which can be expressed in any understandable terms (e.g., a mathematical formula, in prose, or as a flowchart)). The ’295 patent, however, does not describe, to any appreciable extent, an algorithm that corresponds to the function of the claimed “means for allocating.”

*B. Claims 1, 2, 6–11, and 14–16*

Petitioner applies various references against independent claim 1 and dependent claims 2, 6–11, and 14–16 in arguing that the claims are obvious

over the prior art. Pet. 24–38, 42–56. In doing so, Petitioner construes the “means for allocating classification information” limitation of claim 1 as “hardware and/or software for performing the allocating function recited in the claim.” *Id.* at 14. As indicated in the claim construction section, *supra*, we are unable to arrive at an interpretation of the requirements of claim 1 due to the lack of disclosed structure corresponding to the “means for allocating classification information” limitation. A lack of sufficient disclosure of structure under 35 U.S.C. § 112, ¶ 6 renders a claim indefinite, and thus not amendable to construction. *See In re Aoyama*, 656 F.3d 1293, 1298 (Fed. Cir. 2011) (quoting *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010) (“If a claim is indefinite, the claim, by definition, cannot be construed.”)). In the circumstances of this case, because the claims are not amenable to construction, we are unable to conclude that there is a reasonable likelihood that Petitioner would prevail in its challenge of claim 1, and claims 2, 6–11, and 14–16 that depend therefrom.

*C. Claims 17, 21, and 24*

Petitioner contends that claims 17, 21, and 24 would have been obvious under 35 U.S.C. § 103(a) over the combination of Hassan and Witek. Pet. 16–41.

Hassan is directed to transmitting image information to a facsimile machine. Ex. 1003, 1:6–8. Hassan describes an “image capture device” resembling “a small, portable, hand held camera,” that can take a picture and “store a digital representation (image) of the picture in an internal memory.” *Id.* at 2:43–49. Hassan further discloses that “the user of the system may be prompted to enter a supplemental ID number or other text information . . . so

that a user could be reminded of important facts (such as client name, file number, etc.) associated with a particular digital image.” *Id.* at 4:51–60. According to Hassan, the image capture device also includes a facsimile interface “in order to prepare an enhanced digital image for transmission to a remote facsimile machine.” *Id.* at 4:66–67. Hassan also discloses that the image capture device “can be connected to the telephone network anywhere an ordinary telephone jack is available, or, if provided with a cellular telephone capability or connection, anywhere cellular service is available.” *Id.* at 3:11–15.

Witek discloses “a system used to automate facsimile (‘fax’) logging and routing via a computerized system.” Ex. 1004, 1:49–50. Figure 1 of Witek is reproduced below:

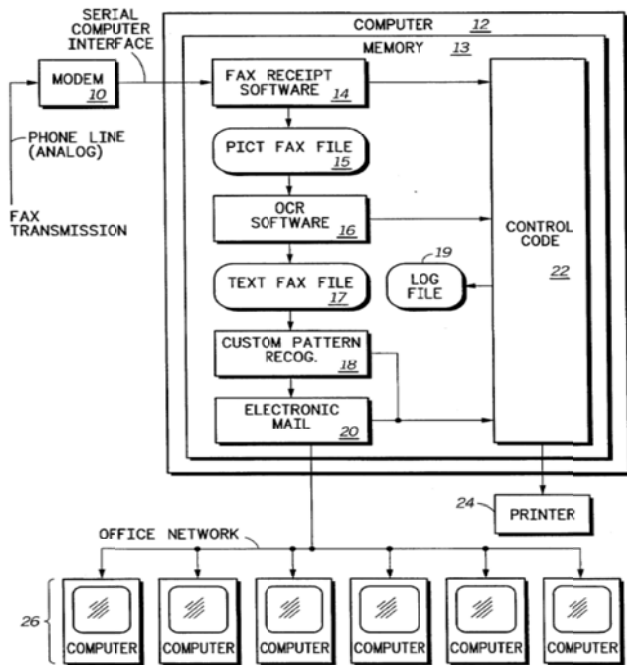


FIG. 1

Figure 1 depicts a block diagram of an embodiment of Witek’s fax data processing system. *Id.* at 1:33–34. The fax processing system includes

computer 12 with memory 13, and fax receipt software program 14 within memory 13. *Id.* at 1:67, 2:8–10, 16. Fax receipt software program 14 “is generally used to receive data from the serial computer interface and store it into a pict fax file 15.” *Id.* at 2:16–18. Witek further discloses that pict fax file 15 stores information received through the modem and is processed by fax receipt software program 14. *Id.* at 2:18–20. According to Witek, optical character recognition (“OCR”) software 16 processes pict fax file 15 and translates pict fax file 15 “from a non-text format to a text format” in order to determine the information needed to electronically log or track the fax transmission, and to route the fax transmission to the proper destination. *Id.* at 2:55–57, 2:65–3:2.

Independent claim 17 recites a method having the steps of “extracting classification information which characterizes the digital images from the received data” and “storing the digital images in the server, said step of storing taking into consideration the classification information.” Petitioner contends that disclosures in Witek meet the above-recited claim 17 limitations. Petitioner contends that Witek discloses analyzing the received fax using OCR software 16 and pattern recognition software 18 to extract classification information, and also discloses storing the digital images in memory 13 of computer 12. Pet. 39–40. Petitioner further contends that Witek discloses that storing the digital image takes the classification information into account because the fax cover sheet is analyzed to determine where the fax should be routed and stored. *Id.* at 40.

In response, Patent Owner argues that, in Witek, the received fax is stored on computer 12 in pict fax file 15 before it is scanned by OCR software 16 and the classification information is extracted. Prelim. Resp. 41.

According to Patent Owner, computer 12, therefore, does not store digital images by “taking into consideration the classification information” as claim 17 requires. *Id.* at 42.

We agree with Patent Owner that Petitioner has not established that Witek teaches the “storing the digital images in the server, said step of storing taking into consideration the classification information” limitation recited in claim 17. Petitioner does not direct us, with any specificity, to evidence demonstrating sufficiently that Witek teaches storing digital images in computer 12 *after* the classification information is extracted from pict fax file 15. Rather, as noted above, Witek describes that, after OCR software 16 and pattern recognition software 18 determine “one or more destinations of the fax received via the modem 10, the fax is routed via an electronic mail program 20 to the proper destination.” Ex. 1004, 3:63–65. Witek further describes the creation of a log file that

will contain, per fax, information such as the time and date of receipt by the program 14, the time of the generation of file 15, any complications or information regarding the OCR software 16, the time the text fax file 17 was generated, the destinations determined by the code 18, the time and destinations transmitted by the e-mail program 20, user information from computers 26 when logging onto or accessing the computer 12, number of pages received per faxed transmission, the sender of the fax, phone numbers, addresses, and any other information which could be regarded as useful to a facsimile user or sender.

*Id.* at 4:45–56. Although the log file contains data that could be described as classification information, the log file does not contain digital images associated therewith.

Petitioner also cites Witek’s disclosure that “[t]he system of FIG. 1 prevents this loss [of fax transmissions] by storing the received fax



permanently on disk or a like media” in support of its contention that Witek discloses claim 17’s “storing the digital images in the server, said step of storing taking into consideration the classification information” limitation. Pet. 23, 40; Ex. 1002 ¶ 120. This statement, however, does not add anything meaningfully specific and sets forth only a stated advantage of the Witek system. Ex. 1004, 5:4–53. For instance, Petitioner does not explain where the disk or like media resides in computer 12, or when and how digital images are stored into such disk or like media while taking into consideration the classification information. That the Witek system can permanently store received faxes does not demonstrate that the Witek system stores digital images in the server, taking into consideration the classification information, as required by claim 17.

Consequently, we are not persuaded that Petitioner has demonstrated a reasonable likelihood that independent claim 17, and claims 21 and 24 that depend therefrom, would have been obvious over the combination of Hassan and Witek.

*D. Claims 22 and 23*

Petitioner contends that claim 22 would have been obvious under 35 U.S.C. § 103(a) over the combination of Hassan, Witek, and Quinn, and that claim 23 would have been obvious under 35 U.S.C. § 103(a) over the combination of Hassan, Witek, Burgess, and RFC 937. Pet. 44–46, 53–56. Claim 22 depends from claim 17, and further requires the step of “providing a telephone number of the at least one telephone unit and/or of the server as part of the classification information.” Claim 23 also depends from claim 17, and further requires the step of “providing location information in

memory at which the digital images to be stored as a part of the classification information.”

As set forth above, Petitioner has not established a reasonable likelihood that claim 17 would have been obvious over the combination of Hassan and Witek. Petitioner does not rely on Quinn, Burgess, or RFC 937 as teaching any limitation of claim 17. Accordingly, we determine that the record before us does not establish a reasonable likelihood that Petitioner would prevail in establishing that claim 22 would have been obvious over the combination of Hassan, Witek, and Quinn, or that claim 23 would have been obvious over the combination of Hassan, Witek, Burgess, and RFC 937.

### III. CONCLUSION

For the foregoing reasons, we conclude that Petitioner has not demonstrated a reasonable likelihood that at least one of the challenged claims of the '295 patent is unpatentable based on the asserted grounds.

### IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is denied; and

FURTHER ORDERED that no *inter partes* review will be instituted pursuant to 35 U.S.C. § 314(a) with respect to any claim of the '295 patent on any of the grounds of unpatentability alleged in the Petition.

IPR2014-00566  
Patent 6,038,295

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