

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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APPLE INC.,  
Petitioner,

v.

SMARTFLASH LLC,  
Patent Owner.

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Case CBM2014-00106<sup>1</sup>  
Patent 8,033,458 B2

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Before JENNIFER S. BISK, RAMA G. ELLURU,  
JEREMY M. PLENZLER, and MATTHEW R. CLEMENTS,  
*Administrative Patent Judges.*

PLENZLER, *Administrative Patent Judge.*

FINAL WRITTEN DECISION  
*35 U.S.C. § 328(a) and 37 C.F.R. § 42.73*

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<sup>1</sup> Case CBM2014-00107 has been consolidated with the instant proceeding.

## I. INTRODUCTION

### A. *Background*

Petitioner, Apple Inc. (“Apple”), filed two Petitions to institute covered business method patent review of claims 1, 6–8, 10, and 11 (“the challenged claims”) of U.S. Patent No. 8,033,458 B2 (Ex. 1001, “the ’458 patent”) pursuant to § 18 of the Leahy-Smith America Invents Act (“AIA”). CBM2014-00106 (Paper 2, “106 Pet.”) and CBM2014-00107 (Paper 2, “107 Pet.”).<sup>2</sup> On September 30, 2014, we consolidated CBM2014-00106 and CBM2014-00107 and instituted a transitional covered business method patent review (Paper 8, “Decision to Institute” or “Dec.”) based upon Petitioner’s assertion that claim 1 is unpatentable based on the following grounds:

<b>Reference[s]<sup>3</sup></b>	<b>Basis</b>	<b>Claims Challenged</b>
Stefik ’235 <sup>4</sup> and Stefik ’980 <sup>5</sup>	§ 103(a)	1
Ginter <sup>6</sup>	§ 103(a)	1

Dec. 26. Petitioner also provides declarations from Anthony J. Wechselberger (“Wechselberger Declaration.”). 106 Ex. 1021; 107 Ex. 1121.

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<sup>2</sup> Unless otherwise specified, hereinafter, paper numbers refer to paper numbers in CBM2014-00106.

<sup>3</sup> Exhibits with numbers 1001–1029 were filed in CBM2014-00106 and those with numbers 1101–1129 were filed in CBM2014-00107. CBM2014-00106 additionally includes Exhibits 1030–1035. For purposes of this decision, where the two cases have duplicate exhibits, we refer to the exhibit filed in CBM2014-00106.

<sup>4</sup> U.S. Patent No. 5,530,235 (June 25, 1996) (Ex. 1013, “Stefik ’235”).

<sup>5</sup> U.S. Patent No. 5,629,980 (May 13, 1997) (Ex. 1014, “Stefik ’980”).

<sup>6</sup> U.S. Patent No. 5,915,019 (June 22, 1999) (Ex. 1015, “Ginter”).

Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 23, “PO Resp.”) and, in support, a declaration from Jonathan Katz, Ph.D. (“Katz Declaration”). Ex. 2029. Petitioner filed a Reply (Paper 33, “Pet. Reply”) to Patent Owner’s Response.

An oral hearing was held on July 7, 2015, and a transcript of the hearing is included in the record (Paper 51, “Tr.”).

We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is issued pursuant to 35 U.S.C. § 328(a) and 37 C.F.R. § 42.73.

For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claim 1 of the ’458 patent is unpatentable.

*B. The ’458 Patent*

The ’458 patent relates to “a portable data carrier for storing and paying for data and to computer systems for providing access to data to be stored” and the “corresponding methods and computer programs.” Ex. 1001, 1:21–25. Owners of proprietary data, especially audio recordings, have an urgent need to address the prevalence of “data pirates” who make proprietary data available over the internet without authorization. *Id.* at 1:29–55. The ’458 patent describes providing portable data storage together with a means for conditioning access to that data upon validated payment. *Id.* at 1:59–2:11. This combination allows data owners to make their data available over the internet without fear of data pirates. *Id.* at 2:11–15.

As described, the portable data storage device is connected to a terminal for internet access. *Id.* at 1:59–67. The terminal reads payment information, validates that information, and downloads data into the portable

storage device from a data supplier. *Id.* The data on the portable storage device can be retrieved and output from a mobile device. *Id.* at 2:1–5.

The '458 patent makes clear that the actual implementation of these components is not critical and may be implemented in many ways. *See, e.g., id.* at 25:49–52 (“The skilled person will understand that many variants to the system are possible and the invention is not limited to the described embodiments.”).

### *C. Related Matters*

The parties indicate that Smartflash has sued Apple for infringement of the '458 patent and identify the following district court case: *Smartflash LLC v. Apple Inc.*, Case No. 6:13-cv-447 (E.D. Tex.). *See, e.g.*, 106 Pet. 20; 106 Paper 5, 2. The parties also indicate that the '458 patent and other patents in the same patent family are the subject of a several other district court cases. *Id.*

In addition to the 106 and 107 Petitions, Apple and other petitioners have filed numerous other Petitions for covered business method patent review challenging claims of patents owned by Smartflash and disclosing similar subject matter.

### *D. The Instituted Claim*

Apple challenges claim 1 of the '458 patent. Claim 1 recites the following:

1. A portable data carrier, comprising:
  - an interface for reading and writing data from and to the carrier;
  - non-volatile data memory, coupled to the interface, for storing data on the carrier;

non-volatile payment data memory, coupled to the interface, for providing payment data to an external device;

a program store storing code implementable by a processor;

a processor, coupled to the content data memory, the payment data memory, the interface and to the program store for implementing code in the program store; and

a subscriber identity module (SIM) portion to identify a subscriber to a network operator

wherein the code comprises code to output payment data from the payment data memory to the interface and code to provide external access to the data memory.

*Id.* at 25:53–26:3.

## II. EVIDENTIARY MATTERS

### A. *Wechselberger Declaration*

Patent Owner contends that the Wechselberger declaration should be given little or no weight. PO Resp. 5–8.

In its Preliminary Response, Patent Owner argued that we should disregard Mr. Wechselberger’s testimony, but we determined that Patent Owner did not offer any evidence that Mr. Wechselberger “used incorrect criteria, failed to consider evidence, or is not an expert in the appropriate field.” Dec. 4, n.11. Patent Owner renews this contention, arguing in its Response that both declarations by Mr. Wechselberger (Ex. 1021; Ex. 1121) should be given little or no weight because they do not state the evidentiary standard that he used in arriving at his conclusions and, therefore, he “used incorrect criteria.” PO Resp. 5–7. In addition, referring to excerpts from Mr. Wechselberger’s deposition, Patent Owner contends that Mr.

Wechselberger “could neither articulate what the difference was between ‘substantial evidence’ and ‘preponderance of the evidence,’ nor could he articulate which standard he was supposed to use when alleging invalidity of claims in a patent.” *Id.* at 5–6. Thus, according to Patent Owner, should we afford any weight to Mr. Wechselberger’s testimony, we would be accepting his opinion without knowing “‘the underlying facts . . . on which the opinion is based’ (i.e., how much evidence he thinks show any of his opinions discussed therein).” *Id.* at 8.

In its Reply, Petitioner argues that “Mr. Wechselberger is a highly-qualified expert,” that Patent Owner offers no evidence disputing that he is a qualified expert, and that an expert is not required to “recite or apply the ‘preponderance of standard’ expressly in order for the expert opinion to be accorded weight.” Pet. Reply 24.

Patent Owner has not articulated a persuasive reason for giving Mr. Wechselberger’s declarations, as a whole, little or no weight in our analysis. Patent Owner has not cited any authority requiring an expert to recite or apply the “preponderance of the evidence” standard in order for the expert opinion to be accorded weight. Under 37 C.F.R. § 42.1(d), we apply the preponderance of the evidence standard in determining whether Petitioner has established unpatentability. In doing so, it is within our discretion to determine the appropriate weight to be accorded the evidence presented, including expert opinion, based on the disclosure of the underlying facts or data upon which that opinion is based. Thus, we decline to make a determination about Mr. Wechselberger’s opinion, as a whole. Rather, in our analysis we will consider, as it arises, relevant portions of Mr.

Wechselberger's testimony and determine the appropriate weight to accord that particular testimony.

*B. Katz Declaration*

Petitioner contends that the Katz declaration should be given little or no weight. Pet. Reply 19–24.

Petitioner contends that “Dr. Katz’s unsupported opinions, to the extent they are given any weight at all, should be given far less weight than Mr. Wechselberger’s.” *Id.* at 19. Specifically, Petitioner argues that Dr. Katz is not qualified as a person of ordinary skill in the art under either party’s definition, he repeatedly stated that “he was ‘not sure’ about various technologies that are indisputably in the relevant prior art, and that he does not know what a POSITA would have understood about that technology,” and he repeatedly stated that “he was ‘not sure’ how a POSITA would interpret several passages of the cited prior art and several passages of the challenged patent[.]” *Id.* at 19–22. Thus, according to Petitioner, “Dr. Katz (a) does not know this information and is therefore not a qualified expert; and/or (b) did not properly consider the scope and content of the prior art or a POSITA’s understanding of the prior art.” *Id.* at 24.

We decline to make a determination as to Dr. Katz’s testimony, as a whole. As noted above, we have the discretion to determine the appropriate weight to be accorded to the evidence presented, including expert opinion, based on the disclosure of the underlying facts or data upon which the opinion is based. Thus, as with Mr. Wechselberger’s opinion, in our analysis we will consider relevant portions of Dr. Katz’s testimony as it arises and determine the appropriate weight to accord that particular testimony.

### III. ANALYSIS

#### A. Claim Construction

We construe all terms, whether or not expressly discussed here, using the broadest reasonable construction in light of the '458 patent specification. *See* 37 C.F.R. § 42.300(b); *see also In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1278–80 (Fed. Cir. 2015) (“Congress implicitly approved the broadest reasonable interpretation standard in enacting the AIA,” and “the standard was properly adopted by PTO regulation.”). For purposes of this Final Written Decision, we determine that “payment data” is the only term requiring an express construction in order to conduct properly our analysis of the prior art.

#### “*payment data*”

Petitioner asserts that “[f]or review purposes, [payment data] is construed to mean ‘data representing *payment made* for requested content data’ and is distinct from ‘access control data.’” 106 Pet. 22; 107 Pet. 24. Patent Owner disagrees, arguing that the term “payment data” should be interpreted to mean “data that can be used to make payment for content.” PO Resp. 10.

Although Petitioner and Patent Owner disagree on the proper broadest reasonable construction of the term “payment data,” both proposed constructions incorporate an element of timing. The main dispute between the parties is the timing of “payment data” in relation to the actual payment operation. For example, Petitioner argues that the '458 patent's definition of the term “encompasses data relating to either *concurrent* or *past* payment.” Pet. Reply 5. In support, Petitioner refers (Pet. Reply 3–4) to the following disclosure from the specification of the '458 patent:

“[t]he payment data received may either be data relating to an *actual payment made* to the data supplier, or it may be a *record of a payment made* to an e-payment system . . . .”

Ex. 1001, 6:60–63 (emphasis added).

Patent Owner, on the other hand, argues that the ’458 patent discloses that “payment data” exists *prior to* the payment operation, i.e., “used for making a payment.” PO Resp. 9 (emphasis omitted). In support of its argument that “‘payment data’ is used for making a payment,” Patent Owner refers to the following disclosure from the specification of the ’458 patent: “[P]ayment data for making a payment . . . is received from the smart Flash card by the content access terminal and forwarded to an e-payment system.” *Id.* (citing Ex. 1001, 20:59–62).

We are persuaded that the broadest reasonable interpretation of the term “payment data,” encompasses both Petitioner’s *and* Patent Owner’s definitions of the term. As used in the ’458 patent, “payment data” encompasses data relating to *future, current, and past* payments. In other words, we are persuaded that the ’458 patent does *not* incorporate an element of timing into the definition of payment data. First, the plain and ordinary meaning of the two words that make up the term—“payment” and “data”—do not incorporate any notion of time and nothing about their combination changes that determination.

Second, we agree with both parties that language in the ’458 patent supports “payment data” representing data existing *prior to, concurrent with, and after* payment for the requested content. For example, the ’458 patent states that “payment data for making a payment to the system owner is received from the smart Flash card by the content access terminal and forwarded to an e-payment system.” Ex. 1001, 20:59–62. We agree with

Patent Owner that this language indicates that payment data exists *prior to* the payment being made for the requested content. *See* PO Resp. 9–10. Petitioner does not address this language. *See* Pet. Reply 4–6. In addition, we agree with Petitioner that the language in the ’458 patent, “payment data received may either be data relating to an actual payment made to the data supplier, or it may be a record of a payment made to an e-payment system,” (Ex. 1001, 6:60–63) clearly shows that “payment data,” includes data for payments that have *already been made*. *See* Pet. Reply 4–5.

Moreover, the plain and ordinary meaning of data does not allow for it to change character based on when it is used in a transaction. For example, a credit card number may qualify as “data relating to payment” before the number is processed, while the number is being processed, and after the number is processed. *See* Ex. 1015, 232:14–24 (providing credit or debit card information to a retail terminal). Thus, without an express description to the contrary, we presume that “payment data” retains the same meaning *before, during, and after* the payment operation. Neither party points to any such contrary description.

In fact, the ’458 patent describes “payment data” in several instances as data relating to payment for the requested data item. Ex. 1001, 10:8–8, 10:28–30, 10:40–41. Thus, we are persuaded that the broadest reasonable interpretation of “payment data” as used in the ’458 patent is “data relating to payment for the requested data item.”

*B. Obviousness over Stefik ’235 and Stefik ’980*

Petitioner contends that claim 1 would have been obvious over Stefik ’235 and Stefik ’980. 106 Pet. 29–31, 39–56. After considering the arguments and evidence presented in the 106 Petition and the Preliminary

Response (CBM2014-00106, Paper 6), we instituted trial with respect to claim 1 concluding that Petitioner was likely to prevail in showing unpatentability under 35 U.S.C. § 103(a) over the combination of Stefik '235 and Stefik '980. Dec. 26.

*1. Overview of Stefik '235*

Stefik '235 teaches a portable Document Card (“DocuCard”) for storing information in a digital form, storing usage rights for the information, processing user-initiated functions and requests to access documents stored therein, interfacing to external devices for reading and writing digital information, and allowing a user to directly interact with the DocuCard. Ex. 1013, 2:29–40, 7:35–42.

*2. Overview of Stefik '980*

Stefik '980 teaches a “repository” for storing digital works, controlling access to digital works, billing for access to digital works and maintaining the security and integrity of the system. Ex. 1014, 6:57–61.

*3. Analysis*

We have reviewed the Petition, the Patent Owner Response, and Petitioner’s Reply, as well as the relevant evidence discussed in those papers. We are persuaded that claim 1 would have been obvious over Stefik '235 and Stefik '980. The parties’ arguments focus on the “payment data” and “subscriber identity module (SIM) portion” limitations recited in claim 1.

*“payment data”*

Claim 1 recites “non-volatile payment data memory . . . for providing payment data to an external device” and “code to output payment data from

the payment data memory.” Petitioner contends that Stefik<sup>7</sup> teaches these limitations related to “payment data” because “Stefik discloses a credit server providing payment data (*e.g.*, billing information; fees; transaction report) to an external device (*e.g.*, clearinghouse) to carry out transactions and billing.” 106 Pet. 44, 52. Stefik describes “generat[ing] billing information for the access which is transmitted to a credit server” (Ex. 1014, 7:34–35) and explains that “[f]or the most part, billing transactions are well understood in the state of the art” (*id.* at 29:61–62). We are persuaded by Petitioner’s contentions regarding Stefik teaching “non-volatile payment data memory . . . for providing payment data to an external device” and “code to output payment data from the payment data memory,” based on our construction of “payment data” discussed above.

Patent Owner’s response to Petitioner’s contentions regarding “payment data” focus on Petitioner’s alleged use of the incorrect construction of “payment data,” arguing that Stefik is directed to “post-usage processing.” PO Resp. 11–13. For example, Patent Owner argues that “as cited throughout the 00106 Petition, Stefik ’235 and Stefik ’980 both refer to ‘credit servers’ such that they are not dealing with payments prior to usage.” *Id.* at 11. As noted above, we construe “payment data” as “data relating to payment for the requested data item,” regardless of when the payment

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<sup>7</sup> Petitioner refers to Stefik ’235 and Stefik ’980, collectively, as “Stefik.” 106 Pet. 27. Petitioner contends that “[b]ecause Stefik ’235 incorporates Stefik ’980 by reference, they should be considered a single reference,” and additionally provides rationale for the combination the combination of the teachings of Stefik ’235 and Stefik ’980. *Id.*, n. 10. In its Response, Patent Owner does not dispute Petitioner’s contentions regarding “Stefik” being a single reference, or Petitioner’s rationale for combining the teachings of Stefik ’235 and Stefik ’980. *See* PO Resp. 10–13.

operation occurs. Accordingly, Patent Owner's arguments related to "payment data," which are all based on timing, are unpersuasive.<sup>8</sup>

*"subscriber identity module (SIM) portion"*

Claim 1 additionally recites a "subscriber identity module (SIM) portion storing identification data to identify a user of said portable data carrier to a network operator."

With respect to this limitation, Patent Owner disputes Petitioner's contention that

A [person of ordinary skill in the art] would have been motivated and found it obvious to employ a memory card for a mobile or cellular device that included a SIM portion that identifies a subscriber to a network operator, such as a mobile phone, as a repository in Stefik's content distribution and access network.

106 Pet. 49, n.17. With respect to motivation to modify Stefik, Patent Owner argues that "[n]either patent identifies anything that indicates that a DocuCard or a repository could be a mobile or cellular phone in which such a memory card would be used." PO Resp. 14. As a result, according to Patent Owner, "there is no reason to change from the 'unique number assigned to the DocuCard upon manufacture' to some other identifying information," and neither the 106 Petition nor Dr. Wechselberger explain why such a change would be necessary. *Id.*

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<sup>8</sup> When discussing "payment data" at oral hearing relative to IPR2014-00112, Patent Owner conceded that if we do not adopt its construction of "payment data," and instead adopt Petitioner's construction, it has no remaining argument as to why Stefik does not teach "payment data." Tr. 77:10–78:14. As noted above, we adopt a broader construction of "payment data" than that proposed by Petitioner.

Petitioner replies that “Stefik expressly discloses that the DocuCard includes unique identifying information” and “[a person of ordinary skill in the art] would have known that a SIM portion would have served the same purpose.” Pet. Reply 10; *see also id.* (“[A person of ordinary skill in the art] would have found it obvious to embed a SIM portion (which could be, e.g., either memory or a card) in a DocuCard repository for the well-known purpose of using the SIM portion to identify the DocuCard repository to a network operator.”).

We agree with Petitioner. The function of the recited “SIM portion” is “to identify a user of said portable data carrier to a network operator.” Petitioner proposes to substitute the DocuCard’s unique identifying information with the user identification means of a SIM card in order to perform the recited function of “identify[ing] a user of said portable data carrier to a network operator.” The ’458 patent acknowledges that “a mobile phone SIM (Subscriber Identity Module) card . . . already include[s] a user identification means, to allow user billing through the phone network operator.” Ex. 1001, 4:9–13; *see also* Tr. 103:7–8 (when discussing the description of the SIM portion in the challenged patent, Counsel for Patent Owner explained that “applicants didn’t need to put more in there because the SIM was already well understood.”). Accordingly, we are persuaded that the substitution of the DocuCard’s unique identifying information with the user identification means of a SIM card involves nothing more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007).

With respect to the obviousness of the proposed modification, Patent Owner questions whether a SIM card is capable of performing the functions of a repository. Specifically, Patent Owner faults the Petition for

[N]ot disclos[ing] whether the ‘unique number assigned to the DocuCard upon manufacture’ has characteristics that would make it compatible with the SIM portion of a mobile phone, for example, whether the number of bits required by the ‘unique number assigned to the DocuCard upon manufacture’ is greater than the number of bits that a SIM portion would utilize to identify a subscriber to a network operator.

PO Resp. 14–15. Patent Owner also argues that the 106 Petition fails to show that a memory card for a mobile or cellular device, such as SIM card, is capable of meeting the requirements of a repository, such as performing the registration process depicted in Figure 3 of Stefik ’235. *Id.* at 15.

Petitioner notes that “[Patent Owner] presents no evidence disputing that a block of memory containing only a single user identifier can be a SIM portion, or that a [person of ordinary skill in the art] would have known how to conform Stefik’s unique identifying number to the well-known SIM specification.” Pet. Reply 10. Specifically, Petitioner notes that “Stefik does not specify a number of bits that must be used for its unique identifier” and “[Patent Owner] presents no evidence substantiating that Stefik’s unique identifier would be incompatible with even the specification of a SIM *card* (not claimed).” *Id.* at 10–11.

We agree with Petitioner. Despite raising questions about the suitability of a SIM card as Stefik’s repository, Patent Owner presents no evidence suggesting incompatibility. PO Resp. 15; Ex. 2029 ¶¶ 17–18. The ’458 patent states explicitly that, “[t]he data storage means can, if desired, incorporate the functionality of a mobile phone SIM (Subscriber Identity

Module) card.” Ex. 1001, 4:9–13. According to the ’458 patent, “[t]he data storage means is based on a standard smart card.” Ex. 1001, 11:28–29. Stefik, however, discloses that “smartcard implementations are inadequate for use as a transportable storage medium due to their limited storage capacities.” Ex. 1013, 2:7–9. For that reason, Stefik’s DocuCard is based on the more powerful Personal Computer Memory Card International Association (PCMCIA) card standard. *Id.* at 4:54–5:22. Because Stefik’s DocuCard is implemented on a PCMCIA card, which is more powerful than the standard smartcard described in the ’458 patent as being capable of incorporating the functionality of a mobile phone SIM card, we are persuaded that Stefik’s DocuCard could also incorporate the functionality of a mobile phone SIM card.

For the reasons set forth above, we conclude that Petitioner has shown, by a preponderance of the evidence, that claim 1 of the ’458 patent would have been obvious over Stefik ’235 and Stefik ’980.

### *C. Obviousness over Ginter*

Petitioner contends that claim 1 would have been obvious over Ginter. 107 Pet. 28–32, 44–66. After considering the arguments and evidence presented in the 107 Petition and the Preliminary Response (CBM2014-00107, Paper 6), we instituted trial with respect to claim 1 concluding that Petitioner was likely to prevail in showing unpatentability under 35 U.S.C. § 103(a) over Ginter. Dec. 25–26.

#### *1. Overview of Ginter*

Ginter discloses a portable “virtual distribution environment” (“VDE”) that can “control and/or meter or otherwise monitor use of

electronically stored or disseminated information.” Ex. 1115, Abstract, Fig. 71, 52:26–27.

## 2. *Analysis*

We have reviewed the Petition, the Patent Owner Response, and Petitioner’s Reply, as well as the relevant evidence discussed in those papers. We are persuaded that claim 1 would have been obvious over Ginter. The only contentions that Patent Owner specifically disputes with respect to with respect to Ginter are those related to the “code to output payment data from the payment data memory . . . and code to provide external access to the data memory” and the “subscriber identity module (SIM) portion” limitations recited in claim 1. *See* PO Resp. 16–22.

### *“code to output payment data”*

As noted above, claim 1 recites “code to output payment data.” Petitioner cites Ginter’s “audit information” (107 Pet. 51, 53) or, alternatively, “credit or debit card information” (*id.* at 62–63) as corresponding to the “payment data” in this limitation. For example, Petitioner cites Ginter’s discussion of providing credit or debit card information to a retail terminal as teaching the claimed “code to output payment data from the payment data memory to the interface.” 107 Pet. 62–63 (citing Ex. 1115, 232:19–24). The cited portion of Ginter explains that “portable appliance 2600 VDE secure subsystem may provide authentication and appropriate credit or debit card information to the retail terminal VDE secure subsystem.” *Id.* at 232:21–24.

As Petitioner notes (Pet. Reply 16), Patent Owner does not address Petitioner’s contentions regarding Ginter’s “credit or debit card information” corresponding to the “payment data” recited in claim 1 (*see* PO Resp. 21–

22), which we find persuasive.<sup>9</sup> As for Petitioner’s contentions regarding Ginter’s audit information, Patent Owner’s arguments presented in its Response do not dispute that the audit information is “data representing payment for . . . requested content data,” which is the basis for Petitioner’s contentions.<sup>10</sup> *See* Pet. 24. Patent Owner’s arguments are focused solely on the timing of the audit information (i.e., when payment was made) in Ginter. *See* PO Resp. 21 (“in the context of Ginter, the audit information is for tracking post-usage information, not current purchase information”).

As noted above, we construe “payment data” as “data relating to payment for the requested data item,” regardless of when the payment operation occurs. Accordingly, Patent Owner’s arguments related to “payment data,” all of which are based on timing, are unpersuasive.

*“subscriber identity module (SIM) portion”*

Patent Owner argues that “[t]he 00107 Petition . . . does not show that it is more likely than not that one of ordinary skill in the art would have considered it obvious for the portable data carrier (e.g. electronic appliance) to communicate with Ginter’s network using a cellular connection, or to include a subscriber identity module (SIM) portion.” PO Resp. 17.

Specifically, Patent Owner argues that a cellular network would not have been obvious because Ginter emphasizes security and describes electronic

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<sup>9</sup> Our Decision on Institution noted that Petitioner’s contentions regarding Ginter’s “credit or debit card information” corresponding to the “payment data” in claim 1’s “code to output payment data” were persuasive. Dec. 22–23.

<sup>10</sup> Petitioner’s challenge is based on construing “payment data” as “data representing payment made for requested content data.” 107 Pet. 24.

appliance 600 communicating only across wired networks, which are more secure than wireless networks. *Id.* at 18 (citing Ex. 1015, 63:42–67).

This argument is unpersuasive. The cited portion in column 63 of Ginter is directed to the physical security of Secure Processing Unit 500, not to the security of communications between an electronic appliance and a clearinghouse. And as Petitioner correctly points out, “Ginter does not limit its disclosure to transmitting information via ‘wired networks.’” Pet. Reply. 18. Patent Owner notes that “the 00107 Petition cites col. 161, lines 5–11 [of Ginter], which states that communications with a clearinghouse ‘may be initiated across the electronic highway 108, or across other communications networks such as a LAN, WAN, two-way cable or using portable media exchange between electronic appliances.’” PO Resp. 18. Column 161, lines 8–11 of Ginter use the phrase “such as” to indicate that LAN, WAN, and two-way cable are non-limiting examples. As Petitioner also correctly points out, Patent Owner’s expert, Dr. Katz, “admits that Ginter explicitly discloses allowing an electronic appliance to use ‘any of the connections . . . normally used within an electronic appliance,’ including broadcast reception and wireless cellular connections.” Pet. Reply 18 (quoting Deposition of Dr. Katz (Ex. 1031) at 171:19–172:1); *see also* Ex. 1031, 172:1–173:2-10, 175:3-5 (testifying that an electronic appliance can be a pager or phone, both of which were known to communicate wirelessly). Accordingly, we are not persuaded that it would not have been obvious to a person of ordinary skill in the art to modify Ginter’s electronic appliance 600 to communicate over a wireless network.

Patent Owner also argues that the disclosure in Ginter of a “portable device auxiliary terminal” communicating “through the use of cellular,

satellite, radio frequency, or other communication means” (Ex. 1015, 233:53–57) does not teach that Ginter’s electronic appliance or portable electronic appliance can communicate by those methods. PO Resp. 18–19. We agree with Patent Owner that this disclosure in Ginter relates to a portable device auxiliary terminal rather than to the electronic appliance or portable electronic appliance. We need not rely on this disclosure in Ginter, however, because the other disclosure in Ginter, discussed in the preceding paragraph, as well as Dr. Katz’s testimony, persuade us that it would have been obvious to a person of ordinary skill in the art for Ginter’s electronic appliance to use a cellular connection requiring a SIM card.

Patent Owner also argues that neither the 107 Petition nor Mr. Wechselberger explain why a person of ordinary skill in the art would have been motivated to replace Ginter’s “information which can be used to uniquely identify each instance of the portable appliance” (Ex. 1015, 229:13–18) with the user identification means of a SIM card. PO Resp. 20.

Petitioner replies that “Ginter’s ‘Host’ electronic appliance contains information used to uniquely identify the appliance” and “[a person of ordinary skill in the art] would have found it obvious to use a SIM portion in a ‘Host’ electronic appliance communicating over a cellular network to serve a well-known purpose—uniquely identifying the electronic appliance to the network operator.” Pet. Reply 17.

We agree with Petitioner. The function of the recited “SIM portion” is “to identify a subscriber to a network operator.” Petitioner proposes to substitute Ginter’s electronic appliance’s “information used to uniquely identify the appliance” with the user identification means of a SIM card in order to perform the recited function of “identify[ing] a subscriber to a

network operator.” 107 Pet. 57–58, n.19. The ’458 patent acknowledges that “a mobile phone SIM (Subscriber Identity Module) card . . . already include[s] a user identification means, to allow user billing through the phone network operator.” Ex. 1001, 4:10–13; *see also* Tr. 103:7–8 (when discussing the description of the SIM portion in the challenged patent, Counsel for Patent Owner explained that “applicants didn’t need to put more in there because the SIM was already well understood.”). Accordingly, we are persuaded that the substitution of Ginter’s electronic appliance’s “information used to uniquely identify the appliance” with the user identification means of a SIM card involves nothing more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007).

Patent Owner also questions “whether the number of bits required by the ‘information which can be used to uniquely identify each instance of the portable appliance’ [in Ginter] is greater than the number of bits that a SIM portion would utilize to identify a subscriber to a network operator.” PO Resp. 20. Petitioner replies that these arguments are unpersuasive for the same reasons as the arguments made with respect to Stefik. Pet. Reply. 19, n.3.

We agree that Patent Owner’s arguments are unpersuasive. Despite raising questions about the suitability of a SIM card for containing Ginter’s “information which can be used to uniquely identify each instance of the portable appliance,” Patent Owner provides no evidence suggesting a SIM card is unsuitable. PO Resp. 20; Ex. 2029 ¶ 25. As discussed above with respect to Stefik, the ’458 patent states explicitly that, “[t]he data storage

means can, if desired, incorporate the functionality of a mobile phone SIM (Subscriber Identity Module) card.” Ex. 1001, 4:9–13. According to the ’458 patent, the data storage means is “based on a standard smart card.” Ex. 1001, 11:28–29. Ginter likewise discloses that “portable appliance 2600 may have the form factor of a ‘smart card’” and, “[a]lternatively, such a portable electronic appliance 2600 may, for example, be packaged in a PCMCIA card configuration (or the like).” Ex. 1015, 230:20–29. Because Ginter’s portable electronic appliance is implemented either on a smart card, which the ’458 patent acknowledges can incorporate the functionality of a mobile phone SIM card, or on a PCMCIA card, which is more powerful than the standard smart card, we are persuaded that one skilled in the art would have found it obvious for Ginter’s portable electronic appliance 2600 to incorporate the functionality of a mobile phone SIM card.

For the reasons set forth above, we conclude that Petitioner has shown, by a preponderance of the evidence, that claim 1 of the ’458 patent would have been obvious over Ginter.

#### IV. MOTIONS TO EXCLUDE

##### *A. Petitioner’s Motion to Exclude*

Petitioner filed a Motion to Exclude (Paper 39), Patent Owner filed an Opposition to Petitioner’s motion (Paper 45), and Petitioner filed a Reply in support of its motion (Paper 50). Petitioner’s Motion to Exclude seeks to exclude: (1) the testimony of Dr. Katz (Ex. 2030); and (2) the portions of the Patent Owner’s Response (Paper 23) that refer to, or rely on, that testimony. Paper 39, 3. As movant, Petitioner has the burden of proof to establish that it is entitled to the requested relief. *See* 37 C.F.R. § 42.20(c). For the reasons stated below, Petitioner’s Motion to Exclude is *denied*.

Petitioner argues that Dr. Katz's testimony should be excluded under Federal Rule of Evidence ("FRE") 702 because he was unable to opine on what a person of ordinary skill in the art would have understood as of the priority date of the '458 patent. Paper 39, 4–5. Specifically, Petitioner refers to Dr. Katz's deposition testimony that he was "not sure" as to (1) what a person of ordinary skill in the art would have known; (2) the operation of the embodiments described in the '458 patent; and (3) how a person of ordinary skill in the art would have interpreted various passages from the cited prior art. *Id.* at 5–10.

Patent Owner counters that Dr. Katz was not sure how to answer the questions in deposition because "Petitioner never established whose definition of a POSITA Dr. Katz was to use." Paper 45, 4.

Petitioner replies that Dr. Katz confirmed at the outset of his deposition that he understood the meaning of counsel's reference to "what a person of ordinary skill in the art would have understood," and that Patent Owner's counsel objected to almost none of the questions that it now claims are unclear. Paper 50, 2–4.

We have reviewed the deposition testimony of Dr. Katz and determine that excluding the testimony, in its entirety, is not warranted. We assess Petitioner's arguments with respect to the weight to be given to relevant portions of Dr. Katz's testimony, rather than to its admissibility. 37 C.F.R. § 42.65.

*B. Patent Owner's Motion to Exclude*

Patent Owner filed a Motion to Exclude (Paper 42), Petitioner filed an Opposition to Patent Owner's motion (Paper 46), and Patent Owner filed a Reply in support of its motion (Paper 49). Patent Owner's Motion to

Exclude seeks to exclude (1) Exhibit 1002; (2) Exhibits 1005, 1008, 1022, and 1027–1029; (3) Exhibits 1006, 1007, 1009, 1012, and 1020; (4) Exhibits 1016–1019; (5) Exhibits 1021 and 1121; (6) portions of Exhibit 1031; and (7) Exhibits 1101–1120 and 1122–1129. Paper 42. As movant, Patent Owner has the burden of proof to establish that it is entitled to the requested relief. *See* 37 C.F.R. § 42.20(c). For the reasons stated below, Patent Owner’s Motion to Exclude is *granted-in-part, denied-in-part* and *dismissed-in-part* as moot.

*Exhibit 1002*

Patent Owner seeks to exclude Exhibit 1002—the First Amended Complaint filed by it in the co-pending litigation—as inadmissible other evidence of the content of a writing (FRE 1004), irrelevant (FRE 401), and cumulative (FRE 403). Paper 42, 2–3; Paper 49, 1–2. Specifically, Patent Owner argues that Petitioner does not need to cite Patent Owner’s characterization of the ’458 patent in the complaint because the ’458 patent itself is in evidence. Moreover, according to Patent Owner, its characterization of the ’458 patent is irrelevant and, even if relevant, cumulative to the ’458 patent itself. *Id.*

Petitioner counters that it relies on Exhibit 1002 not as evidence of the content of the ’458 patent, but to show that Patent Owner’s characterization of the ’458 patent supports Petitioner’s contention that the ’458 patent is a covered business method patent. Paper 46, 2. Thus, according to Petitioner, it is highly relevant to the issue of whether the ’458 patent is a covered business method patent. *Id.* Moreover, contends Petitioner, Patent Owner’s characterization of the ’458 patent in another proceeding is not in the ’458

patent itself, and, therefore, Exhibit 1002 is not cumulative to the '458 patent and FRE 1004 is not applicable. *Id.*

We are persuaded by Petitioner that Exhibit 1002 is offered not for the truth of the matter asserted (i.e., the content of the '458 patent), but as evidence of how the Patent Owner has characterized the '458 patent. Patent Owner has not persuaded us that Exhibit 1002 is irrelevant, at least because its characterization of the '458 patent in prior proceedings are relevant to the credibility of its characterization of the '458 patent in this proceeding. Accordingly, we decline to exclude this exhibit.

*Exhibits 1005, 1008, 1022, and 1027–1029*

Patent Owner seeks to exclude Exhibits 1005, 1008, 1022, and 1027–1029 as irrelevant under FRE 401 and 402 because they are not cited in the Petition, the Wechselberger Declaration, or our Decision to Institute. Paper 42, 3–4; Paper 49, 2.

Petitioner counters that all of these exhibits except Exhibit 1022 (*see* Paper 46, 3 n.4) were cited in the Wechselberger Declaration as “Materials Reviewed and Relied Upon.” Paper 46, 3. Petitioner also points out that Patent Owner similarly filed exhibits not relied upon in its substantive papers. *Id.*

Because Mr. Wechselberger attests that he reviewed these exhibits in reaching the opinions he expressed in this case, Patent Owner has not shown that they are irrelevant under FRE 401 and 402. Accordingly, we decline to exclude Exhibits 1005, 1008, and 1027–1029. We grant the motion as to Exhibit 1022.

*Exhibits 1006, 1007, 1009, 1012, and 1016–1020*

Patent Owner seeks to exclude Exhibits 1006, 1007, 1009, 1012, and 1016–1020 as irrelevant under FRE 401 and 402 because, while cited, they either were not asserted by Petitioner as invalidating prior art or were not instituted upon by the Board. Paper 42, 4–5; Paper 49, 2.

Petitioner counters that all of these exhibits are evidence of the state of the art and knowledge of a person of ordinary skill in the art at the claimed priority date, and are relied upon in both the Petition and the Wechselberger Declaration as evidence of that knowledge. Paper 46, 3–5.

Because these exhibits are evidence relied upon by Petitioner to support its assertions with respect to the state of the art and to knowledge of a person of ordinary skill in the art, which are relevant to obviousness, we are not persuaded that they are irrelevant under FRE 401 and 402. Accordingly, we decline to exclude these exhibits.

*Exhibits 1021 and 1121*

Patent Owner seeks to exclude Exhibits 1021 and 1121—the Declarations of Mr. Wechselberger in the 106 case and 107 case, respectively—under FRE 602 as lacking foundation because they “do[] not state the relative evidentiary weight (e.g., substantial evidence versus preponderance of the evidence) used in arriving at his conclusions” and because they “do[] not sufficiently state the criteria used to assess whether one of ordinary skill in the art at the time of the invention would have been motivated to modify a reference or combine two references.” Paper 42, 6–9, 19–20; Paper 49, 3. Patent Owner also seeks to exclude this testimony under FRE 702 because it “does not prove that Mr. Wechselberger is an expert

whose testimony is relevant to the issue of what is taught and/or suggested by the cited references.” Paper 42, 8, 19–20; Paper 49, 3.

Petitioner counters that FRE 602 is not a basis for excluding Mr. Wechselberger’s expert testimony because FRE 602 plainly states that it “does not apply to a witness’s expert testimony under Rule 703” and, therefore, Patent Owner’s objections “are improper challenges to the *sufficiency* of the opinions presented rather than challenges to their *admissibility*.” Paper 46, 5–6. Petitioner also argues that experts are not required to recite the “preponderance of the evidence” standard expressly. *Id.* at 7 (citing IPR2013-00172, Paper 50 at 42). With respect to FRE 702, Petitioner notes that Patent Owner offers no evidence disputing that Mr. Wechselberger is a qualified expert and notes that he qualifies as an expert under both parties’ definitions of a person of ordinary skill in the art. *Id.* Petitioner also notes that Patent Owner did not object to its offer of Mr. Wechselberger as an expert in the co-pending district court litigation. *Id.*

Patent Owner acknowledges that FRE 602 does not apply to expert witnesses, but argues that Mr. Wechselberger never states that he is an expert in the subject matter of the challenged claims. Paper 49, 3 n.2.

We are not persuaded by Patent Owner’s arguments. Mr. Wechselberger has a Bachelor and Master in Electrical Engineering, and has decades of experience in relevant technologies. Ex. 1021 ¶¶ 2–12, App. A. We are, therefore, not persuaded by Patent Owner’s argument that he has not provided sufficient proof that he is an expert. And as Petitioner correctly points out, an expert is not required to recite the “preponderance of the evidence” standard expressly in order for the expert testimony to be accorded weight, much less admissibility. Moreover, FRE 602 expressly

recites that it “does not apply to a witness’s expert testimony under Rule 703.” The testimony sought to be excluded by Patent Owner is expert testimony under Rule 703. Accordingly, we decline to exclude this testimony under either FRE 602 or FRE 702.

*Exhibit 1031*

Patent Owner seeks to exclude portions of Exhibit 1031 on the grounds that the questions asked were outside the scope of Dr. Katz’s declaration, and, therefore, should be excluded for not being in compliance with 37 C.F.R. § 42.53(d)(5)(ii). Paper 42, 9–18; Paper 49, 3–5.

Petitioner counters that Patent Owner cannot move to exclude this testimony because it failed to object to the questions during the deposition and, therefore, waived any such objection under Rule 42.64(a). Paper 46, 8 (citing *Westlake Servs., LLC v. Credit Acceptance Corp.*, CBM2014-00008, Paper 48 (“Patent Owner objected to many, but not all, . . . questions . . . , indicating its belief that at least some of the questioning was proper.”)). Petitioner further contends that the testimony is relevant to issues in this proceeding. Paper 46, 8–20.

Patent Owner replies that, unlike *Westlake Servs.*, here Patent Owner seeks to exclude only discrete portions of the deposition testimony as opposed to “114 pages of the deposition,” and that “[a] fair reading of the record demonstrates that Patent Owner’s objections were made and preserved at the deposition.” Paper 49, 3.

As an initial matter, a motion to exclude is not a proper vehicle for a party to raise the issue of cross-examination exceeding the scope of the direct testimony. Moreover, as Petitioner correctly points out, many of the questions and answers that Patent Owner now seeks to exclude were not

objected to during the deposition, even giving the transcript the “fair reading” that Patent Owner suggests. “An objection to the admissibility of deposition evidence must be made during the deposition.” 37 C.F.R. § 42.64(a).

Nevertheless, we turn to the merits. Even assuming that exceeding the scope of direct testimony was a proper basis for a Motion to Exclude and that Patent Owner had objected to every question now sought to be excluded, we still would not be persuaded that exclusion of this testimony, in its entirety, is the proper remedy. Based on our review of the arguments made in the Patent Owner Response, as well as the relevant portions of the deposition transcript, we are not persuaded that the questions asked were outside the scope of Dr. Katz’s declaration.

For example, Patent Owner argues that the testimony at page 36, line 10 to page 37, line 11 is “not relevant because it relates to conditional access and none of the claims at issue relate to conditional access to stored data.” Paper 42, 9. As Petitioner points out, however, both the ’458 patent and the prior art involve “minimizing unauthorized content use to ensure content owners are paid.” Paper 46, 9. Moreover, as Petitioner notes, Dr. Katz testifies, in testimony that Patent Owner has not moved to exclude, that a skilled artisan would have “understood that payment validation could be made a condition of providing content that was electronically sold.” *Id.* (quoting Ex. 1031, 27:4–9). As a result, we are not persuaded that questions about what a person of ordinary skill in the art would know about conditional access are outside the scope of Dr. Katz’s direct testimony.

As a further example, Patent Owner argues that the testimony at page 44, line 18 to page 46, line 1 directed to “SIM cards” is not relevant because

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“[t]he issue in this proceeding is not whether SIM cards were or could be used for billing.” Paper 42, 10. As Petitioner notes, however, a skilled artisan’s “understanding of a known SIM card and its uses is relevant to establishing the state of the art surrounding the claimed element about which Dr. Katz opines.” Paper 46, 10. As a result, we are not persuaded that questions about what a person skilled in the art would know about SIM cards in the prior art period being used for billing is outside the scope of Dr. Katz’s direct testimony.

Much of the testimony Patent Owner objects to relates to Dr. Katz’s understanding of the ’458 patent and the prior art references. As for Patent Owner’s arguments related to the testimony allegedly being only relevant to related proceedings, we note that the deposition of Dr. Katz covered his testimony in four related proceedings involving four different patents: CBM2014-00102 (Patent 8,118,221 B2), CBM2014-00106 (Patent 8,033,458 B2), CBM2014-00108 (Patent 8,061,598 B2), and CBM2014-00112 (Patent 7,942,317 B2). Ex. 1031, 1. Although some of the questions posed may have not related directly to this proceeding, we are not persuaded that the answers elicited are irrelevant to the issues in this proceeding. The patents in these cases disclose similar subject matter and the proceedings include overlapping prior art references. Accordingly, we decline to exclude these portions of Exhibit 1031.

*Exhibits 1101–1120 and 1122–1129*

Patent Owner seeks to exclude Exhibits 1101–1120 and 1122–1129 (filed in the 107 case) under FRE 403 on the grounds that they are identical to Exhibits 1001–1020 and 1022–1029 (filed in the 106 case), and are therefore “needless cumulative evidence.” Paper 42, 18–19; Paper 49, 5.

Petitioner counters that these exhibits should not be excluded for the same reasons that Exhibits 1001–1020 and 1022–1029 should not be excluded. Paper 46, 2 n.3.

We do not rely on these exhibits. Accordingly, Patent Owner’s Motion to Exclude is moot as to these exhibits.

#### V. CONCLUSION

Petitioner has shown, by a preponderance of the evidence, that claim 1 of the ’458 patent is unpatentable under 35 U.S.C. § 103.

#### VI. ORDER

Accordingly, it is:

ORDERED that claim 1 of the ’458 patent is determined to be *unpatentable*;

FURTHER ORDERED that Petitioner’s motion to exclude is *denied*;

FURTHER ORDERED that Patent Owner’s motion to exclude is *granted-in-part, denied-in-part and dismissed-in-part*;

FURTHER ORDERED that Exhibit 1022 shall be expunged; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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