IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
MIDLAND/ODESSA DIVISION

CARDWARE INC., Plaintiff	§	
v.	§	Civil Action No. 7:24-CV-00278-DC-DTG
GOOGLE LLC, Defendant.	§	JURY TRIAL DEMANDED

DEFENDANT GOOGLE LLC'S REPLY CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION

A POSITA cannot make sense of the disputed claims with reasonable certainty, and CardWare has provided no expert declaration rebutting the opinions of Dr. John Black. Instead, in response to the issues outlined in Google's Opening Brief ("Br." (Dkt. 58)), CardWare's Responsive Brief ("Resp." (Dkt. 63)) resorts to attorney argument, distorting Judge Payne's prior decision and Google's arguments, and color-coded illustrations that further muddle the scope of the disputed terms. But CardWare cannot avoid indefiniteness by rewriting its claims or rendering meaningless certain claim terms. And because a POSITA cannot ascertain with reasonable certainty the scope of the disputed terms, those terms are indefinite.

II. GOOGLE'S EXPERT TESTIMONY IS RELEVANT AND PROPER

Indefiniteness is evaluated from the perspective of a POSITA, *Nautilus, Inc. v. Biosig Instruments, Inc.,* 572 U.S. 898, 908 (2014); requires determining whether such a skilled person would understand the scope of the claim when it is read in light of the specification, *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986); and is evaluated in light of knowledge extant in the art at the time the patent application is filed, *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1556–57 (Fed. Cir. 1983). The burden of proving indefiniteness remains on the party challenging validity, who must establish it by clear and convincing evidence. *Dow Chem. Co. v. Nova Chems. Corp.*, 809 F.3d 1223, 1224 (Fed. Cir. 2015).

As additional support for its indefiniteness positions, Google provided an expert declaration from Dr. John Black. CardWare does not dispute that Dr. Black is a POSITA in the relevant art. As such, and given the ambiguity of CardWare's claims and the intrinsic record, his declaration is relevant to the issue of indefiniteness. *Dow Chem. Co. v. Sumitomo Chem. Co*., 257 F.3d 1364, 1371 (Fed. Cir. 2001) (stating that when the court is unable to determine the meaning of the asserted claims after assessing the intrinsic evidence, it may look to additional extrinsic evidence, such as expert testimony, to help resolve any lack of clarity (citing *Vitronics Corp. v. Conceptronic, Inc.,* 90 F.3d 1576, 1582 (Fed. Cir. 1996))); *Hormone Rsch. Found., Inc. v. Genentech, Inc*., 904 F.2d 1558, 1562 ("Claim interpretation involves a review of the specification,

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the prosecution history, the claims (including unasserted as well as asserted claims), and, *if necessary,* other extrinsic evidence, such as expert testimony." (citations omitted, emphasis added)). Dr. Black's declaration explains how and whether a POSITA would understand the disputed claim terms when, as here, those terms are unclear in light of the intrinsic record.

Throughout its Responsive Brief, CardWare attacks Dr. Black's opinions. But Dr. Black analyzed everything in the intrinsic record as well as a prior claim construction order involving the same patents. *See, e.g.*, Dkt. 58-2 (Black Decl.) ¶¶ 22, 30–32. CardWare contends that Dr. Black offers "no technical analysis whatsoever" and that his declaration is conclusory. Resp. at 3. Not true. Dr. Black offered opinions regarding the state of the art at the time of the earliest claimed priority date of the asserted patents and ties that knowledge to his analysis of the disputed terms. *Id*. ¶¶ 33, 39, 42, 45, 46. The Court may rely upon such evidence to find that Google has met its burden of proving indefiniteness. *Sumitomo Chem.*, 257 F.3d at 1371; *Hormone*, 904 F.2d at 1562.

Although CardWare could have submitted its own expert declaration, it declined to do so. Therefore, the only *evidence* from the perspective of a POSITA supporting either party's arguments is Dr. Black's opinions. *See Berkheimer v. HP Inc.*, 881 F.3d 1360, 1364 (Fed. Cir. 2018) (finding no clear error in relying on accused infringer's expert declaration that a POSITA would not have understood a claim term with reasonable certainty when patentee provided none).

III. ARGUMENT

A. U.S. Patent No. 10,339,520

1. "payment information"; "issued payment information"; "an issuer provided payment information"; "the issuer provided payment information"; "a static device account number payment information"; "the payment information"; "a issuer provided payment information"; "issuer provided payment information" (Claim 10)

Claim 10 of the '520 Patent is indefinite because it recites numerous variations of "the payment information" that have no clear antecedent basis and, thus, no reasonably certain meaning. Br. at 3–10. Additionally, the scope of "payment information" and "a issuer provided payment information" is unclear rendering those terms indefinite. *Id.* at 3–10.

As explained in Google's Opening Brief, in *CardWare Inc., v. Samsung Electronics Co.* (E.D. Tex.), the Eastern District of Texas found that "payment information" in the preamble "introduce[ed] the term in a generic manner so as to encompass the various recitals of 'information' involved in ultimately 'making a payment transaction.'" Dkt. 58-1 (*CardWare v. Samsung* Claim Construction Memorandum and Order) at 23. Google contends that this cannot be correct because the claim language distinguishes different types of payment information and it is not clear how "the payment information" can refer back to a generic recital of all information involved in making a payment transaction given the different uses of the term. Br. at 7.

CardWare incongruously responds that Judge Payne's Order says "payment information" does not refer to *all* information in the claim but instead refers to the information involved in making a payment transaction. Resp. at 8 ("In other words, 'payment information' does not refer to *all* information; that would include issued/issuer provided payment information that the complete 'payment information' replaces."). That reading of the Order is not correct because, as described in more detail below, the "issued payment information"/"an issuer provided payment information" is necessarily involved in making a payment transaction according to the language of the claim. '520 Patent at 17:10–20. CardWare then contends that the preamble's "payment information" is the complete, combined payment information generated and used in the final limitation of Claim 10 (Resp. at 4, 8), but that directly contradicts the Eastern District of Texas finding that the preamble's "payment information" generically refers to *all* information in the claim. Thus, neither party agrees with the reasoning of the Eastern District of Texas.

a. There is no clear antecedent for "the payment information."

Claim 10, in pertinent part, recites:

> **10.** A method of storing and generating payment information in an electronic device, the method comprising:
>
> accepting a user input of issued payment information input at a touch screen display of the electronic device, wherein the information comprises an issuer provided payment information;
>
> wherein the electronic device comprises device-specific and user-specific information; and,

> wherein the issuer provided payment information is communicated wirelessly; and,
>
> receiving wirelessly a static device account number payment information for storage on the electronic device; and wherein
>
> at least a portion of the payment information is a limited-use number for limited use by the device, in place of a [sic] issuer provided payment information; and, . . .

'520 Patent at 17:8–33. In context, the antecedent basis for "the payment information" (yellow highlight) is unclear: it could refer back to any of "payment information," "issued payment information," "an issuer provided payment information," or "a static device account number payment information" (green highlights). *See* Br. at 4–8.

CardWare attempts to explain how "the payment information" is not indefinite by way of a kaleidoscope of color-coding.[1] Resp. at 4. CardWare suggests that the preamble's "payment information" is the complete payment information that is recited in the final limitation of the claim. Resp. at 4–5 (colored in purple). That explanation ignores the plain language of Claim 10. First, the preamble states that "payment information" is stored; however, only the "static device account number payment information" is stored. So the reference to "storing . . . payment information" in the preamble must mean that "payment information" there refers to something other than the complete payment information generated in the last claim step. Second, it makes little sense that "payment information" introduced in the preamble, which purportedly refers to the complete payment information created in the last method step, would otherwise appear in the middle of the claim. '520 Patent at 17:21–23 (colored in purple by CardWare). Indeed, in the context of all the preceding references to different types of payment information, there is no natural reading of "the payment information" in the middle of the claim as referring to the end result generated in the very last limitation / method step. *Sci. Applications Int'l Corp. v. United States*, 169 Fed. Cl. 643, 701 (2024) ("the antecedent relationship implies a sequence as a matter of grammar" (citing *Hytera Commc'ns Co., Ltd. v. Motorola Sols., Inc.*, 841 F. App'x 210, 218 (Fed. Cir. 2021))).

[1] CardWare tries to illustrate the validity of the claim by referring to a technology tutorial submitted in a separate case. *See* Resp. at 5. This is improper. "[T]utorials should be . . . directed to the underlying technology (rather than argument related to infringement or validity) . . . [and] the parties may not rely on or cite to the tutorial." *See* Judge Counts' Standing Order Governing Patent Proceedings at 5. CardWare also never identified this image in its disclosure of extrinsic evidence.

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CardWare also contends that neither "issued payment information" nor "an issuer provided payment information" make sense as the antecedent basis because "the payment information" is used "in place" of issuer-provided payment information. Resp. at 6–7. That argument ignores the points raised in Google's Opening Brief. Namely, Google explained that the disputed term is used in place of "***a*** issuer provided payment information." *See* Br. at 6 ("And while it is true that the yellow-highlighted 'the payment information' is used 'in place of a issuer provided payment information' ['520 Patent] at 17:21–23), it does not follow that this recitation of issuer provided payment information refers back to either of the preceding 'issued payment information' or 'an issuer provided payment information' . . . That is, the use of the article 'a' indicates a new recital of issuer provided payment information that has not been previously recited in the claim."). CardWare never addresses this. CardWare also incorrectly asserts that "the payment information" cannot refer to "issued" payment information because that information must come from "a bank or other card issuer." Resp. at 7. This is not so. Nothing in the intrinsic record limits "issued payment information" or "an issuer provided payment information" as being from a bank. As just one example, a DAN (which is a static number or token) is a limited-use number for limited use by the electronic device in making a payment transaction that is issued to a user that does not come from a bank or a card issuer; instead, it comes from a token service provider.[2]

CardWare also argues that the disputed term does not refer to "static device account number payment information" because every time the claim refers to that type of information, it says so. Resp. at 7. But that just begs the question what "the payment information" refers to when such language is absent. CardWare further contends that the only "payment information" in Claim 10 that has "portion[s]" is the complete payment information. Resp. at 8. This is not accurate. The last limitation does not refer to portions—it claims using two pieces of information together. '520 Patent at 17:30–33. More importantly, Claim 10 is a "comprising" claim, "which is synonymous with 'including,' 'containing,' or 'characterized by,' [and] is inclusive or open-ended and does not

[2] The DAN is illustrated in CardWare's diagram as coming from the Card Issuing Network and not the Consumer's Bank. Resp. at 5.

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exclude additional, unrecited elements or method steps." Manual of Patent Examining Procedure § 2111.03. That is, all the claimed types of "payment information" could be a "portion" of something else and still be encompassed by Claim 10. CardWare thus reads too much into the recitation of "at least a portion of the payment information"; this is a standard patent-drafting technique, not some veiled reference to the final limitation. *See id.* (discussing the scope of applicant's claims directed to "a purified oligonucleotide comprising *at least a portion of* the nucleotide sequence" in the context of a "comprising" claim).

b. The scope of "payment information" is not clear.

The scope of "payment information" ('520 Patent at 17:28) in the "dynamically generating a one-time limited-use number" step is not reasonably certain and therefore indefinite.[3] Br. at 8–9. The pertinent portion of Claim 10 recites:

> dynamically generating a one-time limited-use number based on at least one of a set of information including: user-identifying information; user secrets; device information; device secrets; time; merchant; facility location; sequence count; payment information; account information; amount; and transaction information;

'520 Patent at 17:8–29. As explained in Google's Opening Brief, the preamble recites storing and generating payment information. *Id*. at 17:8–29. The claim then recites the dynamic generation of a one-time limited-use number based on at least one of a set of information that includes "payment information" (blue highlight). *Id*. If the preamble's "payment information" encompasses *all* recitals of information in the claim, then the scope of "payment information" in the dynamic generation step is ambiguous because it remains unclear which of the claim's various "payment information" terms is used to generate a one-time limited-use number. Br. at 9.

CardWare asserts that the reference to "payment information" highlighted in blue above "can be any payment information" that it wants. Resp. at 9. This underscores rather than resolves the definiteness problem. The Patent Act requires that a patent specification "conclude with one

[3] Contrary to CardWare's argument, Resp. at 9, Google does contend that "payment information" ('520 Patent at 17:28) is indefinite, as evidenced by the Opening Brief's separate discussion regarding this term's lack of reasonable certainty as well as the identification of the term in Google's Disclosure of Proposed Claim Constructions. *See* Ex. 4 at 4.

or more claims *particularly pointing out and distinctly claiming* the subject matter which the applicant regards as [the] invention." 35 U.S.C. § 112, ¶ 2 (2006 ed.) (emphasis added). A patent must be precise enough to afford clear notice of what is claimed, thereby "'appris[ing] the public of what is still open to them,'" *Markman v. Westview Instruments, Inc.,* 517 U.S. 370, 373 (1996) (citation omitted), in a manner that avoids "[a] zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims," *United Carbon Co. v. Binney & Smith Co.,* 317 U.S. 228, 236 (1942). Based on CardWare's explanation regarding "payment information," the public would never know when they are at risk of infringement. *See Nautilus*, 572 U.S. at 909–10 (discussing risk presented to the public based on imprecise and ambiguous patent claims). As such, CardWare's explanation fails as a legal matter.

c. The scope of "a issuer provided payment information" is not clear.

The scope of "a issuer provided payment information" ('520 Patent at 17:22–23) is not reasonably certain and therefore indefinite.[4] Br. at 9–10. The pertinent portion of Claim 10 recites:

> at least a portion of the payment information is a limited-use number for limited use by the device, in place of a issuer provided payment information;

'520 Patent at 17:21–23. The claim recites that "the payment information" is used by the device "in place of a issuer provided payment information" (yellow highlight). *Id*. The claim previously recites "issued payment information," "an issuer provided payment information," and "the issuer provided payment information." '520 Patent at 17:8–20. The inclusion of the article "a" before the disputed term would indicate that it is a *different* issuer provided payment information than those similar terms introduced earlier in the claim. Br. at 10. The final claim limitation introduces yet more ambiguity. There, the claim recites using static and dynamic numbers together in place of "issuer provided payment information." '520 Patent at 17:30–33. This recitation lacks either "a"

[4] CardWare again states that Google is not contending this term is indefinite. Resp. at 9. This is not true. It is Google's position that "a issuer provided payment information" ('520 Patent at 17:22-23) is indefinite as evidenced by the Opening Brief's separate discussion regarding this term's lack of reasonable certainty as well as the identification of the term in Google's Disclosure of Proposed Claim Constructions. *See* Ex. 4 at 4.

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or "the" to indicate whether this is a newly recited issuer provided payment information or a previously recited instance. For these reasons, a POSITA would not be reasonably certain regarding the scope of this term. Br. at 9–10.

CardWare's argument implicitly agrees there is ambiguity in the claim. CardWare contends that the complete payment information is used in place of "issuer provided payment information" that is communicated wirelessly **or some other issuer-provided payment information** that may already be stored in the device. Resp. at 9–10. This argument directly conflicts with CardWare's arguments in another portion of its Responsive Brief, where it alleges that "an issuer provided payment information" cannot be the antecedent for "the payment information" because "the payment information" is supposed to be used "in place" of issuer-provided information. *Id*. at 6–7. In short, CardWare inconsistently argues that "an issuer provided payment information" both can and cannot be the antecedent for "the payment information," demonstrating the ambiguity.

Relatedly, CardWare argues that the complete payment information is used in place of "a issuer provided payment information" and contends that the article "a" does not change this fact. Resp. at 9–10. CardWare goes on to assert that complete payment information can be used in place of any number of previously recited issuer provided payment information, without stating which it may be. *Id*. This argument fails for the same reasons related to "payment information" in the previous subsection. That is, the claim does not provide notice to the public regarding the metes and bounds of its invention, in direct contravention of 35 U.S.C. § 112, ¶ 2. *See Nautilus*, 572 U.S. at 909–10. For these reasons, this term is indefinite. Br. at 9–10.

B. U.S. Patent No. 11,176,538

1. "said device account information" (Claim 4)

The term "said device account information" in Claim 4 of the '538 Patent is indefinite because a POSITA could not determine its scope with reasonable certainty. Br. at 10–12. Claim 4, which depends from Claims 1 and 3, recites "***said*** device account information" but that term has no antecedent in any of Claims 1, 3, or 4. *Id*. Claims 1, 3, and 4 recite numerous variations of "information" (Br. at 11 (green highlights)), but it is unclear which (if any) of those terms is the

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antecedent for the disputed term. Br. at 10–12.

CardWare's arguments do nothing to clarify the scope of the disputed term. Resp. at 10–13. In fact, CardWare's arguments make the scope of "said device account information" even more unclear. CardWare asserts that when read "in context," the disputed term refers to the "complete device payment information" that is transmitted for processing and validated by a payment issuer authority. Resp. at 10–11. CardWare also argues the fact that Claim 4 "uses a slightly modified phrase 'device account information' does not create indefiniteness or suggest it is talking about anything other than the same transmitted 'complete device payment information' that is validated (or not validated) by a payment processing authority." *Id*. at 11–12. CardWare points to nothing in the intrinsic record as support for these arguments. *See id*. at 10–13. Specifically, CardWare cites to nothing in either the specification or prosecution history to indicate the two terms are the same. Instead, CardWare relies on attorney argument to conflate "device account information" and "complete device payment information." *Id*.

In its Opening Brief, Google identified numerous potential antecedents for the disputed term. Br. at 11. For example, Claim 4 recites:

> **4.** The method of claim 3, wherein the generating the limited-use payment information utilizes a unique device generated information limited-in-use to said selected issuer-payment method, in payment transactions performed by said device, in place of said selected issuer-payment information; and,
>
> wherein said device account information will be rejected as invalid when not including a valid device generated limited-use information.

'538 Patent at 20:40–48. CardWare contends that the yellow-highlighted term refers to "complete device payment information" but never addresses why it cannot be referring to either "the limited-use payment information" or "a unique device generated information" highlighted in green above.[5]

[5] In arguments related to the "[device-transmitted] limited-use payment information" term, CardWare asserts that Claim 4 discusses "validation . . . of both the 'complete device payment information' *and* a sub-portion that is limited-use information." Resp. at 14 (emphasis added). There, CardWare seemingly suggests that "said device account information" could refer to both complete device payment information and "limited-use payment information," in contradiction to the arguments made in relation to this term.

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Both terms reference device-specific information because Claim 4 states they are part of the generating step taking place at the device. *Id*. at 20:40–44. CardWare does not account for this possibility and the specification does not provide any guidance. Google's Opening Brief also detailed that in independent Claim 1, the "static limited-use payment information," "dynamically-generated limited-use payment information," and resultant "complete device payment information" all are device-specific, presenting other possibilities for the antecedent basis. Br. at 12. The fact that the specification does not define or explain these terms adds to the ambiguity.

CardWare additionally argues that "said device account information" is "designed to include other information" such as "sub-pieces of information" (Resp. at 12) but fails to point to any portion of the intrinsic record detailing which "sub-pieces" would be within the scope of the disputed term. CardWare attempts to tie this back to Claim 1's "complete device payment information" by stating that term includes static limited use payment information and "the dynamically-generated limited-use payment information." *Id*. CardWare adds further confusion to the analysis in arguing that Claim 1's "dynamically-generated limited-use payment information" is the same device-generated limited-use information that is part of Claim 4. *Id*. As explained above, Claim 4 separately recites "generating the limited-use payment information utilizes a unique device generated information" making it unclear how (or if) this phrase and "said device account information" may refer back to "dynamically-generated limited-use payment information" in Claim 1. CardWare fails to show where in the intrinsic record this is explained.

CardWare contends that neither Google nor Dr. Black consider the contextual clues or try to analyze what information, in the context of Claim 4, is considered valid or invalid. Resp. at 12–13. Not so. As explained in his declaration, Dr. Black considered the entirety of the claims, specifications, and prosecution histories in forming his analysis. Dkt. 58-2 (Black Decl.) ¶¶ 4, 22. During his deposition, Dr. Black also explained that he considered each of the claims at issue here in context, including the step of validation:

> **Q.** And so in your analysis of whether or not the said device account information was indefinite, did you take into account the validation described in Claim 1?

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> **A.** I mean, I certainly considered all of Claim 1 and 3 because Claim 4 is essentially combines those two into it. And since there's a dependence on some validation of the transaction having occurred, I would have considered that concept as being part of Claim 4.

Dkt. 63-2 (Black Tr.) at 128:12–21. Tellingly, CardWare ignores these statements.

2. "said information" (Claims 9, 27)

Claims 9 and 27 of the '538 Patent are indefinite because a POSITA would not be reasonably certain about the scope of "said information" recited in each claim. Br. at 13–18.

Claim 9 recites "said information" suggesting that it refers back to some previous recitation of information and appears in a limitation that refers to generating limited-use payment information. '538 Patent at 22:5–11. Claim 8, from which Claim 9 depends, recites numerous different types of information. Claim 1, from which Claim 8 depends, also recites numerous types of information. Thus, the antecedent for "said information" may be any, or some combination, of the different types of "information" recited in Claims 1 and 8. Br. at 15–16.

CardWare incorrectly contends that "said information" in Claim 9 refers to the four pieces of "information" introduced in Claim 8 related to dynamic generation. Resp. at 16. CardWare asserts that this is the only "logical" reading and points to a table in columns 18–19 of the '538 Patent specification for support. Resp. at 17. But the table that CardWare insists provides the logic for its argument *does not even recite the same terms*. *See* '538 Patent at Col. 18–19. Indeed, the terms quoted in CardWare's parenthetical do not match up with the language of Claim 8. *See* Resp. at 17 (quoting "a sequential parameter"; "certain user information"; "transaction identifiers"; "user secrets"; "payment authority secrets"). As such, CardWare's argument cannot be correct.

Claim 27 recites creating a cryptogram number by combining numerous types of information. Br. at 16–18. In the next limitation, Claim 27 recites "said information" without describing which, if any, of the claim's previously recited "information" is thereby encompassed. *Id*. at 18. Further, Claim 25, from which Claim 27 depends, also recites various types of information presenting more potential antecedents (*e.g.*, "online purchase information," "merchant information," etc.). *Id*. at 17–18. The specification provides no guidance to resolve this ambiguity;

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therefore, a POSITA would not be reasonably certain which antecedent "information," or which combination of antecedent "information," was encompassed by "said information." *Id*. at 16–18.

CardWare contends, without support, that "said information" in Claim 27 refers to "a payment account information, [and] a user information" in the immediately preceding limitation. Resp. at 18. To arrive at this conclusion, CardWare undertakes a scavenger hunt across claim limitations. *Id*. at 18–19. For example, CardWare asserts the fact that "information stored in the device and specific to the device" is "not communicated" is the clue that it is secret information. *Id*. at 19 (attempting to eliminate potential antecedent terms). As another example, CardWare states the only information left over as the proper antecedents for "said information" is "payment account information" and the "user information." *Id*. With no sense of irony, CardWare goes so far as to conclude that the "claim phrases are even described in the same order—blue, green, then yellow—in both limitations" of Claim 27. *Id*. Of course, the colors match up because CardWare made up the coloring scheme.

3. "[device-transmitted] limited-use payment information" (Claim 7)

Claim 7 of the '538 Patent is indefinite because the scope of "device-transmitted limited-use payment information" is unclear even after CardWare obtained its Certificate of Correction ("COC") for Claim 1. Br. at 18–19. Neither Claim 1 nor Claim 3, from which Claim 7 depends, recite "device-transmitted limited-use payment information," making the antecedent for the disputed term unclear. *Id*. The pertinent portion of Claim 7 recites:

> a confirmation result of payment authority authenticating said device-transmitted limited-use payment information,
>
> a confirmation result of payment authority authenticating said device-transmitted complete device payment information

CardWare contends that the disputed term "device-transmitted limited-use payment information" (yellow highlights) refers to the term "dynamically-generated limited-use payment information" that appears in Claim 1. Resp. at 14. This cannot be true. By CardWare's own admission, the "dynamically-generated limited-use payment information" of Claim 1 is combined

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with the "static limited-use payment information" to generate a "complete device payment information." *Id.*; *see also* '538 Patent at 19:58–67. Thus, the "dynamically-generated limited-use payment information" is *already* part of the "complete device payment information." And it is this "complete device payment information" that is transmitted from the electronic device to a recipient reader via NFC in Claim 1. '538 Patent at 20:17–20. The "complete device payment information" is the only "device-transmitted" information recited in Claims 1 or 3. *See id.* at 19:35–20:29 (reciting one transmitting step), 20:34–39 (reciting no transmitting step). This is the term that Claim 7's green-highlighted "device-transmitted complete device payment information" is referencing. Therefore, Claim 7's recitation of "device-transmitted limited-use payment information" does not have any antecedent and is not reasonably certain. Br. at 18–19.

CardWare incorrectly contends that Claim 4 of the '538 Patent clarifies Claim 7. Resp. at 14. First, Claim 7 does not depend from Claim 4. *See* '538 Patent at 20:40–21:50. Second, Claim 4 is directed to "generating the limited-use payment information" (*id.* at 20:40–41) whereas Claim 7 is directed to "the visual conveying of the transaction status" (*id*. at 21:31–32). CardWare's assertion that these claims have a similar concept is also inaccurate; CardWare points to no portion of the intrinsic record indicating why a POSITA would consider these two claims in the same way. *See generally* Resp. As such, Claim 4 has no bearing on the analysis of Claim 7.

Even assuming, *arguendo*, that Claims 4 and 7 were similar, they do not recite the terms in the same way. CardWare states that "Claim 4, like claim 7, also discusses validation (i.e. 'authenticating') of both the 'complete device payment information' and a sub-portion that is limited-use information." Resp. at 14. In fact, Claim 4 never recites the term "complete device payment information" and never says that "limited-use information" is a sub-portion of "complete device payment information." *See* '538 Patent at 20:40–48. CardWare further attempts to liken Claim 4's "device account information" to Claim 1's "complete device payment information" (Resp. at 14 (green highlights)) but never explains why the two terms are recited differently between those claims. CardWare similarly attempts this for Claim 4's "valid device generated limited-use information" by equating it to Claim 1's "dynamically-generated limited-use payment

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information" (Resp. at 14 (yellow highlights)), which fails for the same reason. Claim 4 never recites "device-transmitted limited-use payment information" or "device-transmitted complete device payment information" and therefore provides no insight into Claim 7's use of those terms.

CardWare even admits that Google's reading of Claim 7 is correct. *See* Resp. at 14 ("Google is correct that the disputed phrase in claim 7 refers to "device-transmitted limited-use payment information," and not "dynamically generated limited-use payment information."). But CardWare's assertion that those two terms are the same thing, based on Claims 4 and 7, is not supported by the intrinsic record. Resp. at 14–15. CardWare's summary of the specification is not accurate and does not support its argument. *Id*. at 15 ("CardWare's construction is also consistent with the specification, which explains that the dynamically generated number can be verified by the "payment authority."). The specification states that "a unique number may be generated by the [ ] device and verified by the payment authority." *Id*. (citing '538 Patent at 10:30–33). This does not show that the above-discussed terms are the same. Rather, the specification uses a different term altogether ("a unique number") and does not describe validation of two separate numbers or a number and some sub-portion. Thus, Claim 7's "device-transmitted limited-use payment information" is not the same as "dynamically generated limited-use payment information."

CardWare also argues that the changes to Claim 1 via its COC "have no bearing on the understandability of the terms of claim 7." Resp. at 15. As Google previously argued, CardWare did not amend Claim 7's recitation of "limited-use payment information" in its COC, implying that the "device-transmitted limited-use payment information" term in Claim 7 refers to some other type of limited-use payment information, and not the term that was subject of the COC. Br. at 19. CardWare's Responsive Brief statements do not refute this point.

4. "said secrets" (Claim 27)

A POSITA would not be reasonably certain about the scope of "said secrets" in Claim 27 of the '538 Patent. Br. at 19–20. There are no "secrets" recited in either Claim 27 or Claim 25, from which Claim 27 depends. *Id*. Further, the specification and intrinsic record provide no guidance. *Id*. at 20 (explaining that the specification fails to provide guidance regarding Claim

27's recitation of cryptographic computation of a dynamically generated one-time-use cryptogram number). This is a textbook example of a claim that fails for lack of antecedent basis.

CardWare counters that "[b]ecause 'the information stored in the device and specific to the device' is not communicated in the transaction but is still known to the device and the payment processing authority, then such information must constitute 'secrets' (because only the device and the payment processing authority know them, and they cannot be intercepted because they are not communicated in a transaction)." Resp. at 20. "Therefore, it logically follows, that the term 'said secrets' corresponds to the 'information stored in the device and specific to the device and which is not communicated in the transaction.'" *Id*. Throughout its explanation, CardWare fails to point to any part of the intrinsic record to support its argument and makes no effort to explain how a POSITA would arrive at that conclusion—it relies solely on attorney argument.

Moreover, it is not true that Dr. Black agrees that "said secrets" corresponds to the "information stored in the device and specific to the device and which is not communicated in the transaction." Resp. at 20 (citing Black Tr. at 162:17–163:10). Instead, he opined that the scope of "said secrets" is not clear from the claim and specification:

> **Q.** But it's reasonable to say that the secrets in that wherein -- in the second wherein clause could refer to information stored in the device and specific to the device which is not communicated in the transaction; right?
>
> **A.** I mean, I think that's the intent is that secrets refers to part of that category, ***like I said, there could be other things outside of that category, but secrets in a cryptographic context would be in that category, along with other information***. So I think it's -- the reference to said secrets is referring to, you know, anything in that category that would be considered by the protocol or the specification or the context to be sensitive.

Black Tr. at 162:17–163:10 (emphasis added).

IV. CONCLUSION

For the foregoing reasons and the reasons explained in Google's Opening Brief, Google respectfully requests that the Court find the above-identified terms indefinite.

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Respectfully Submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on the 26th day of June, 2025, a true and correct copy of the foregoing document was filed electronically with the Clerk of Court using the CM/ECF system. As of this date, all counsel of record have consented to electronic service and are being served with a copy of this document through the Court's CM/ECF system.

/s/ Matthias A. Kamber
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