**IN THE UNITED STATES DISTRICT COURT**
**FOR THE WESTERN DISTRICT OF TEXAS**
**WACO DIVISION**

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| PROXENSE, LLC,<br><br>Plaintiff,<br><br>vs.<br><br>SAMSUNG ELECTRONICS, CO., LTD. AND SAMSUNG ELECTRONICS AMERICA, INC.,<br><br>Defendants. | Case Nos. 6:21-cv-00210-ADA<br><br>**JURY TRIAL DEMANDED** |

**PLAINTIFF PROXENSE, LLC's RESPONSIVE CLAIM CONSTRUCTION BRIEF**



**GOOGLE EXHIBIT 1024**
**GOOGLE v. PROXENSE**
**IPR2024-00783**

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## I. Introduction

Proxense's proposed constructions find superior support from the available evidence and in particular the intrinsic record. Samsung's proposed constructions impermissibly change the meaning of claims, add limitations that are not present in the claims, and inject confusing language into the claims. Proxense notes that Samsung's opening claim construction brief (ECF. No. 33, hereinafter "Op. Br.") does not correctly recite Proxense's proposed constructions for several terms and fails to present any arguments regarding Proxense's proposed construction for certain terms. For the reasons detailed below, the Court should adopt Proxense's proposed constructions.

### A. The Claimed Inventions

The inventions set forth in the patents-in-suit (U.S. Patent Nos. 8,352,730, 9,298,905, and 10,698,989 ("730 Patent Family" or "Family A") and U.S. Patent Nos. 9,049,188 and 9,235,700 (the "188 Patent Family" or "Family B") allow users to carry, control, and protect their own personal data on devices like mobile phones, which allows for secure financial transactions using those devices. Biometric authentication and use of remote (*e.g.*, web-based) applications requires an element of trust between the user and the service provider. The user must trust that the service provider can and will protect and will not abuse personal data. Utilizing online services, such as social media, office, productivity, financial, travel, and other services, requires the user trust the service provider to safeguard the personally identifying information a user provides in connection with using the service. Such personally identifying information could include biometric data used, for example, as a means of verifying identity of an authorized user. There exists a need to safeguard and limit the information that is actually shared with multiple service providers. The inventions of the patents-in-suit address such issues by providing ways to use biometric information securely to access and/or utilize private, sensitive information.

Family A are directed to inventions ensuring biometric data privacy while enabling biometric authentication. The claimed inventions improve on the prior art by providing for multiple levels of authentication, such that a user is verified as properly in possession of a biometric access instrumentality, and also biometrically verified as authorized to access sensitive and/or secure resources. Family B are directed to inventions that improve the capabilities and flexible arrangements of multiple devices and instrumentalities that are used to provide means of authorized access to access sensitive and/or secure resources while retaining security.

## II. Construction of Disputed Terms

### A. Samsung Incorrectly Recites Proxense's Proposed Constructions and Positions for a Significant Portion of the Disputed Terms

Samsung's brief incorrectly characterizes Proxense's position and proposed constructions for the following phrases (a) "Persistently storing . . . a tamper proof format written to a storage element on the integrated device that is unable to be subsequently altered" /"a tamper proof format written to the memory that is unable to be subsequently altered", (the "'Subsequently Altered' Phrases"); (b) "receiving an access message from the agent allowing the user access to an application" / "receiving an access message from the agent" / "an access message from the third-party trusted authority-indicating that the third- party trusted authority successfully authenticated the ID code" / "a transaction being completed responsive to the third-party trusted authority successfully authenticating the ID code" / "a transaction is completed responsive to successful authentication of the ID code" (the "'Receiving Authentication' Phrases"); and (c) "access message."

As discussed below, Proxense notified Samsung of its errors on November 1, 2021 and Samsung has refused to correct them. Proxense thus believes that Samsung's misrepresenting Proxense's positions and its accompanying failure to address the constructions that Proxense

actually proposes means that Samsung has waived any argument against this Court's adoption of Proxense's proposed constructions for the affected claim terms.

**1. Samsung's Brief Disregarded Proxense's Proposed Construction for "Access Message" and Misrepresents Proxense's Positions For Other Disputed Claim Language**

For the claim term "access message," Samsung's opening brief incorrectly attributes the proposed construction "a notification" to Proxense, and then proceeds to address that incorrect construction in its briefing. This is not, however, the construction that Proxense proposes; Proxense's proposed construction for "access message" is "a signal or notification enabling or announcing access," and Samsung has been aware of this as of October 17, 2021 at the latest. *See* Declaration of Conor B. McDonough ¶¶ 6-8, Exs. D, E.

Since Samsung misrepresents Proxense's proposed construction for "access message," Samsung's briefing on this term is irrelevant, or at minimum, directed to a strawman that is not in fact at issue here. Proxense does not believe litigation-by-waiver should be common, but here, Samsung appears to have willfully deprived this Court of its arguments against Proxense's *actual* proposed construction for "access message." *See Intertrust Techs. Corp. v. Microsoft Corp.*, 275 F. Supp. 2d 1031, 1049–50 (N.D. Cal. 2003), as amended (July 7, 2003) (finding waiver where defendant's opening Markman brief never addressed each term proposed for construction or the parties' accompanying proposed constructions, whereas plaintiff had undertaken to do so). Samsung has refused to correct the issue despite being put on notice of them as of November 1, 2021.

This problem applies to other claim language as well. For example, Samsung's brief misattributes to Proxense proposed constructions for the "Subsequently Altered" Phrases, as well as the "Receiving Authentication" Phrases, incorrectly suggesting that Proxense has proposed constructions for these phrases. In fact, Proxense has only ever argued that these terms need not

be construed or should be given their plain and ordinary meaning.

**B. Family A**

**1. "Persistently storing . . . a tamper proof format written to a storage element on the integrated device that is unable to be subsequently altered" (730:1, 15) / "a tamper proof format written to the memory that is unable to be subsequently altered" (730:8).**

| Proxense's Proposed Construction | Samsung's Proposed Construction |
|---|---|
| No construction necessary or possible, plain and ordinary meaning[1] | Permanently storing in a form that prevents subsequent writing to store new data or modifications to existing data |

The above two different phrases are not properly submitted for construction by Samsung because they each contain several different terms. Samsung's proposed construction for these two phrases, "permanently storing in a form that prevents subsequent writing to store new data or modifications to existing data" simply rephrases the plain and ordinary meaning of the existing claim term "that is unable to be subsequently altered." This proposed construction adds nothing but unnecessary confusion by pulling in the distinct terms "persistently storing" and "tamper proof" as though they also mean "unable to be subsequently altered." This is by design. Samsung previously proposed the same exact construction for the terms "Persistently storing" and "tamper proof" such that these phrases would repeat the same exact limitation multiple times within the claim. See Decl. ¶¶3 , Ex. A. Samsung seeks to misconstrue the longer phrase to add limitations to terms that are not so limited.

The limitation "that is unable to be subsequently altered" is in plain English and uses no terms of art or specially defined terms. The claim language requires storage on a medium that is persistent in a tamper proof format, which tamper proofing has the additional specific attribute of not being able to be subsequently altered once in memory. The terms "Persistently storing" and

[1] As explained previously, Samsung's opening brief inaccurately recited Proxense's position regarding this proposed phrase for construction.

"tamper proof" do not, standing alone, contain a requirement that limits subsequent alteration and it would be improper to add that limitation to those other terms independently.

In fact, Samsung claims in a footnote to present the same construction for the sub-terms "persistently storing" and "tamper proof format." However, Samsung has not properly submitted those terms for construction. Other asserted claims in this action (905 and 989 Patents) use the term "persistently storing" distinctly and without the additional limitation of "unable to be subsequently altered." Thus, Samsung has waived the argument that "persistently storing" can be separately construed. *See Cent. Admixture Pharmacy Servs., Inc. v. Advanced Cardiac Sols.*, P.C., 482 F.3d 1347, 1356 (Fed. Cir. 2007) (noting district court's ruling that failure to raise arguments during claim construction resulted in waiver); *accord Music Choice v. Stingray Digital Grp. Inc.*, 2019 WL 8110069, at *3 (E.D. Tex. Nov. 19, 2019) (noting that courts find waiver where claim construction arguments could have been raised, but were not).

Moreover, the 730 Patent specification makes clear that permanently storing is merely one embodiment of "persistently storing":

> Persistent storage 226 persistently stores biometric data from one or more users which can be provided according to specific implementations. **In one embodiment**, at least some of persistent storage 226 is a memory element that can be written to once but cannot subsequently be altered. Persistent storage 226 can include, for example, a ROM element, a flash memory element, or any other type of non-volatile storage element.

730 Pat. 4:29-36 (emphasis added). While persistent storage can be read only memory (ROM), it can also be "any other type of non-volatile storage element." If "persistently" meant "permanently" or if Samsung's entire proposed construction could be read into the term "persistently storing" alone, then the term "unable to be subsequently altered" would be rendered meaningless and redundant.

Samsung also attempts to impute bad faith to Proxense. Samsung falsely stated in its

opening brief that Proxense proposed the construction "A format for storing data that cannot be changed unless it is deleted and replaced" for these two long phrases. Proxense never proposed such a construction for these phrases. Instead, Proxense proposed that construction for the term "tamper proof format" only, without the additional limitation "that cannot be subsequently altered."[2] By unilaterally substituting one of Proxense's proposed constructions for two entirely different phrases, Samsung has attributed to Proxense the appearance of bad faith associated with apparently ignoring the plain and ordinary meaning of the additional limitation in the longer phrase and the prosecution history of the 730 Patent.[3] Proxense did no such thing. Proxense's position is that term "unable to be subsequently altered" is clear on its face and requires no further clarification and that this limitation cannot be read into the terms "persistently storing" nor "tamper proof" standing alone. While Samsung is free to argue that the terms are synonymous, it cannot do so by falsely attributing a proposed construction to Proxense. Samsung's arguments should be rejected for addressing a substituted construction.

**2. "device ID code" (730:1, 3, 8, 10, 12, 15) / "ID Code" (905:1-3, 8-11, 13-14; 989:1-2, 4-8)**

| Proxense's Construction | Samsung's Construction |
|---|---|
| Plain and ordinary meaning, or, if construed: A unique code identifying a device | The device-specific code that identifies the device |

The parties agree that the term means a code that identifies a device, but only Proxense's proposal of giving this term its plain and ordinary meaning comports with accepted canons of construction. This term is not a complex or technical one, and a jury would certainly be capable of understanding the plain meaning of the term as set forth in the asserted claims. And each of the

[2] Proxense no longer seeks the construction of the distinct term "tamper proof format," which was also not raised by Samsung in its opening claim construction brief.

[3] Proxense informed Samsung of the incorrectly listed construction on November 1, Samsung refused to correct the issue. Decl. ¶¶ 16-17, Ex. F.

patents in suit uses the same or substantially similar term in different contexts, such that giving the term "device ID code" / "ID code" its plain and ordinary meaning across each patent leads to the appropriate result: the same or substantially similar term is treated consistently across related patents. In context, it is clear that the claimed ID code is one that "identifies," as is the nature of what the code identifies. The term does not require construction.

If the Court concludes that the term "device ID code" / "ID code" should be construed for additional clarity, only Proxense's proposal makes sense in the context of the claims. The claim language "uniquely identifying the integrated device" and "uniquely identifying the smartphone among a plurality of smartphones" is found in the claims of the 730 and 989 Patents, and the specification of all three related patents. ("code or device ID . . . uniquely identifies the biometric key" 730 Pat. 4:45-47; 905 Pat. 5:41-42; 989 Pat. 5:59-61). Proxense's proposed construction comports with this language.

Samsung's proposal, on the other hand, does not make sense in the context of the claim. At best, the additional limitation "device specific" is merely redundant in claims of the 730 and 989 Patents that include the additional limitations "uniquely identifying the integrated device" and "uniquely identifying the smartphone among a plurality of smartphones." At worst, the addition of the words "device specific" in Samsung's proposed construction interposes an additional limitation whereby "device-specific" means that the device is tied to one device ID code, which is immutable, and that such a claimed device cannot ever be given a different unique identifier. Neither the specifications nor the claims of the asserted patents supports such an additional limitation. A code that "uniquely identifies" a device need not be immutable, it merely needs to be unique and capable of identifying a given device as distinct from all other devices.

Samsung's proposal would read out several embodiments in the specifications of all three

related patents. Although the specifications teach that the device identifier *could* be permanent (*e.g.*, provided during the manufacturing process, as at 730 Pat. 4:47-48; 905 Pat. 5:43-44; 989 Pat. 5:61-62), it is also clear that another ID code could be provided during enrollment with a specific system (*e.g.*, 730 Pat. 4:11-12, 49-51; 905 Pat. 5:4-7, 42-46; 989 Pat. 5:24-25, 63-65), and contemplates that the same device could be used to access multiple and different secure applications (*e.g.*, 730 Pat. 5:27-39; 905 Pat. 6:20-36; 989 Pat. 6:41-58), or where the same device is used in both "open and "closed" systems having different enrollment and authorization authorities (*e.g.*, 730 Pat. 5:53-60; 905 Pat. 6:50-56; 989 Pat. 7:5-12), each of which assigns and uses a unique identifier for the same enrolled device.

Samsung misunderstands or mischaracterizes the file history. Samsung argues that the file history is evidence that the applicant intended the term to mean "device-specific" as distinct from being "specific to the user of the device." But the claimed invention identifies specific users by means of biometric data, not by device-specific codes, and the combination of biometric data for a user, combined with a unique identifier for a device allows for the confirmation that (a) that device is authorized, and (b) the device is possessed by the authorized user. *See* Decl. Ex. H (730 Pat. File History - Remarks in Amendment Jan. 3, 2011 at 8). The distinction to which Samsung refers merely resolved the fact that the prior art did not disclose the combination of user specific biometric data and unique device identifying code. *See id*. at 8-10 (noting that prior art reference merely sent a scrambled representation of the biometric data to the authorization system, not two distinct units of information, the biometric data and a unique device ID code). The Applicant explicitly stated that "the claimed invention . . . sends *the code uniquely identifying the integrated device* for authentication" and that the prior art reference "does not disclose any additional data, such as a *code, that uniquely identifies* an integrated device" and that it "does not disclose or

suggest a code *uniquely identifying* an integrated device." *See* Decl. Ex. H (730 Pat. File History - Remarks in Amendment Jan. 3, 2011 at 8-10) (emphasis added).

Applicant only used the term "device specific" in that discussion to describe the concept of a "code uniquely identifying" a device, as absent from the prior art. Samsung's argument treats this passing discussion as a far more onerous prosecution disclaimer. The term requires no construction or, if construed, Proxense's construction better comports with the intrinsic evidence and prosecution history.

### 3. "access message"[4] (730:1, 8, 12, 15; 905:1, 9, 13)

| Proxense's Construction | Samsung's Construction |
|---|---|
| A signal or notification enabling or announcing access | A signal permitting a user to access |

The parties dispute appears to center over whether the "access message" is limited to something that causes access to be permitted, or rather is a broader term that encompasses something that not only causes access, but can also announce that access is permitted. The claim language and specification show that access message can do more than allow access.

The claim language itself ("receiving an **access message** from the agent allowing the user access to an application . . . .") shows that "access message" is broader than a message that allows access. The word "allowing" as used in this context can be understood to mean both "causes access to be permitted" and "announces that access is permitted." The latter would permit the application to move to a next step or inform (*e.g.*, check appropriate age before granting access) a party that access was permitted (*e.g.*, pop up a window to inform a user).

The specification discloses several examples of "access message" having an effect other

[4] As noted previously, Samsung's opening brief did not present or address Proxense's proposed construction for "access message," instead addressing a withdrawn construction "A notification." Although it believes Samsung has waived argument regarding this term, Proxense presents its arguments in support of its proposed construction for the Court's benefit.

than permitting access. For example, an "access message" that provides an announcement that access is enabled can be an LED ("In one embodiment, LED 130 can also confirm that . . . authenticated has completed.", 730 Pat. 3:33-35; 905 Pat. 4:28-30; 989 Pat. 4:47-48) or a pop-up window ("Response to successful authentication of the key, access is allowed 470 to application. In the slot machine example, a new pop-up window can be spawned to indicate a successful age verification.", 730 Pat. 6:28-31; 905 Pat. 7:28-29; 989 Pat. 7:51-53). Other embodiments disclose that the "access message" can also be one that leads an element of the system to enable access (*e.g.*, "Authentication module 310 can send a message to application 330, or otherwise allow access to the application, responsive to a successful authentication by trusted key authority 320.", 730 Pat. 5:23-26; 905 Pat. 6:17-19; 989 Pat. 6:37-40); ("In one embodiment, application module 330 allows access by a user after receiving a message from authentication module 310.", 730 Pat. 5:34-36; 905 Pat. 6:31-33; 989 Pat. 5:34-36). In another embodiment, access message can have the effect of moving to the next step to ask for more information: "If authentication is successful, the trusted key authority sends an access message to the application to allow user access and/or provide additional information from the profile (such as the user's age)." 730 Pat. 7:18-21.

Moreover, the term "access message" appears in claims 1, 9, and 13 of the 905 Patent where it "indicat[es] that the third-party trusted authority successfully authenticated the ID code". And although claim 4 of the 989 Patent does not recite "access message," it does contain similar language: "the third-party trusted authority sending an indication that the third-party trusted authority authenticated the ID code to another party." Claim 12 of the 730 Patent recites the steps of receiving an "access message" and allowing access "in response to a positive access message" as entirely separate steps. These examples are most consistent with a construction that the access message can be "indicating" (*i.e.* announcing) that access is enabled, but can also have an enabling

function (as in Proxense's proposed construction).

Claims "must be construed so as to be consistent with the specification, of which they are a part." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (*en banc*). The specification of the 730 Patent family contains numerous examples that describe an "access message" as a signal or notification that enables access, and that provide an announcement that access is enabled. Samsung's proposed construction, however, improperly excludes the latter embodiments from the claim. *See Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527 F.3d 1379, 1383 (Fed. Cir. 2008) ("[O]ur court has cautioned against interpreting a claim term in a way that excludes disclosed embodiments, when that term has multiple ordinary meanings consistent with the intrinsic record.").

**4. "receiving an access message from the agent allowing the user access to an application" (730:1, 8, 15) / "receiving an access message from the agent" (730:12) / "an access message from the third-party trusted authority-indicating that the third-party trusted authority successfully authenticated the ID code" / (905:1, 9, 13) / "a transaction being completed responsive to the third-party trusted authority successfully authenticating the ID code" (989:1, 5) / "a transaction is completed responsive to successful authentication of the ID code" (989:7)**

| Proxense's Construction | Samsung's Construction |
|---|---|
| No construction necessary or possible, plain and ordinary meaning | receiving a signal from the agent permitting a user to access an application/ receiving a signal from the agent permitting a user to access |

As discussed previously, Samsung misrepresented Proxense's position with respect to these "Receiving Authentication" Phrases. Proxense has only ever proposed that it is not possible or necessary to construe these phrases because they are too long and contain multiple claim terms or that they be afforded their plain and ordinary meaning.[5] Moreover, because constituent terms

[5] *See* Decl. ¶¶4-8 , Exs. B, E Samsung also asserts in a footnote that "Proxense has also proposed sub-terms 'access message' (all claims) and 'a signal permitting a user to access.' Samsung's proposed term is the same." ECF No. 33 at 8 n.3. Proxense cannot discern the meaning of this

are submitted for construction, these longer phrases need no further construction.

These phrases should retain their plain and ordinary meaning, as is generally presumed. *See Phillips*, 415 F.3d at 1312. The jury will not have difficulty understanding the meaning of these phrases as they are in plain English with no terms of art. To the extent the court finds that individual discrete terms within this phrase require construction, those terms are submitted separately for construction ("access message," and "ID code"). *See CloudofChange*, 2020 WL 4004810, at *2. Samsung has not met the burden to depart from the plain and ordinary meaning, where its brief is silent on this issue.[6] *See K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1363 (Fed. Cir. 1999). The Court should, therefore, decline to construe these phrases other than according to their plain and ordinary meaning.

**5. "third-party trusted authority" / "agent" (730:1,8; 905:1, 19, 10; 989:1, 9, 10)**

| Proxense's Construction | Samsung's Construction |
|---|---|
| No construction needed | No construction needed |

Proxense no longer seeks to submit this term for construction.

**6. "wherein the biometric data and the scan data are both based on a fingerprint scan by the user" (730:5)**

| Proxense's Construction | Samsung's Construction |
|---|---|
| No construction needed, plain and ordinary meaning | Invalid under §112 ¶4 |

Dependent claim 5 is not invalid; it properly reduces the number of possible fingerprints from those intrinsic to the "palmprint" of independent claim 1.

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statement. Proxense has never proposed that the Court also construe "a signal permitting a user to access" because that is not a term in any claim.

[6] Proxense also cannot locate in Samsung's brief any arguments about these phrases (ECF No. 33 at 8-10) that address the two recognized exceptions (patentee-as-lexicographer and the disavowal of full claim scope) to the general rule giving terms their plain and ordinary meaning. *See CloudofChange, LLC v. NCR Corp.*, 2020 WL 4004810, at *1-2 (W.D. Tex. July 15, 2020) (quoting *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)).

Claim 1 of the 730 Patent describes multiple categories of "biometric data" as "selected from a group consisting of a palm print, a retinal scan, an iris scan, a hand geometry, a facial recognition, a signature recognition and a voice recognition." Claim 5 of the 730 Patent properly narrows the scope of "biometric data" to a single "fingerprint". The plain and ordinary meaning of "palm print" would be understood to include some combination of prints from the heel and/or flat of the hand, with multiple fingerprints and/or a thumb print (*see, e.g.,* 730 Pat. 3:4-11, expanding exemplary biometric data from "fingerprint" to additional metrics like an entire "palm print"; *id.* at 3:29-33, indicating that biometric data capture could include thumb or other fingerprints).

And even if the claims remain ambiguous, despite repeated disclosures of a "fingerprint" as an exemplary type of "biometric data" in the specification as indications of the scope of this claim term, it should be construed to preserve validity, such that "fingerprint" is understood to be one example of the "biometric" information intrinsic to a "palmprint", and thus dependent claim 5 properly limits the scope of claim 1. *See Phillips*, 415 F.3d at 1327. The scope of claim 5 is not mysterious and should not be found invalid.

### C. Family B

#### 1. "hybrid device" (188:1-2, 15, 20; 700:1-13, 16)

| Proxense's Construction | Samsung's Construction |
|---|---|
| A device comprising an integrated personal digital key (PDK) and an integrated receiver-decoder circuit | Indefinite |

Proxense's proposed construction reflects the express claim language of the 188 and 700 Patents, which clearly describe the scope of a claimed "hybrid device." Claim 1 of the 188 and 700 Patents explicitly recite that the claimed "hybrid device" comprises a personal digital key and an integrated receiver decoder circuit.[7] Similarly, the method claims of both patents recite a "hybrid device" comprising the same two limitations "the hybrid device including an integrated

[7] The preamble for both of these claims is "a hybrid device comprising."

PDK and the integrated RDC." These claims, therefore, clearly define the scope of "hybrid device," as set forth in Proxense's proposed construction.

A claim need not include all potential embodiments. Samsung argues that the term "hybrid device" is indefinite because the claims do not include certain embodiments in the specification. But this argument is facially doomed: Samsung admits that it can discern the scope of the claims by pointing out what embodiments are excluded. *See* Op. Br. at 13-14. Samsung's expert Dr. Nielson only reinforces this admission. As person holding himself out as a PHOSITA, he explains that an "unclaimed embodiment has a hybrid device with only a RDC." Op. Br.-2 at ¶ 93. He could not have determined what the claim excludes without first discerning the scope of the claim. The scope of the claim can, therefore, be determined (even if some potential embodiments are excluded). And to avoid indefiniteness, that is all a claim needs to do. *See Nautilus Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014).

**2. "personal digital key" (188:1, 10; 700:1, 11)**

| Proxense's Construction | Samsung's Construction |
|---|---|
| An operably connected collection of elements including an antenna and a transceiver for communicating with a RDC and a controller and memory for storing information particular to a user | a device that includes an antenna, a transceiver for communicating with the RDC and a controller and memory for storing information particular to a user |

The Parties' essential dispute is whether a "personal digital key" must be a stand-alone, monolithic device (as Samsung argues) or not (as Proxense argues). Proxense's proposed construction properly reflects the patent's recitation of the elements comprising a personal digital key, which can be an operably connected collection of components integrated into a hybrid device, such as a cell phone. These elements need not be physically connected by wires, contrary to Samsung's arguments.

The shared specification of Family B does not constrain a "personal digital key" to a series

of physically connected elements in a single device. A "personal digital key" must have, at minimum, "an antenna and a transceiver for communicating with a RDC (not shown) and a controller and memory for storing information particular to a user." 188 Pat. 13:46-49; 700 Pat. 14:4-7. For example, the specification explains that the function of a PDK can be implemented in a cell phone where a "hybrid device" has the form factor of a SIM card, and "is merely inserted in place of a conventional SIM card to provide this functionality." 188 Pat. 14:24-32; 700 Pat. 14:49-57. In another example, the PDK function can become part of a cell phone by connecting via "internal integration or an access port," such that the transceiver and antenna of the PDK are again those of the cell phone into which it is integrated ("the PDK function becomes part of the cell phone" and "the PDK enabled phone uses the back channel to perform other validation/update functions via the cellular infrastructure."). 188 Pat. 15:40-52; 700 Pat. 15:65-16:10. In such embodiments where the hybrid device/PDK function is integrated into a cell phone (*e.g.*, with a SIM card), the transceiver and/or antenna of the PDK is provided by the cell phone, and the memory and controller of the PDK are provided by the SIM card. This supports Proxense's construction, and condemns Samsung's proposed construction to the extent Samsung intends it to require the PDK be a stand-alone, monolithic device.

Samsung's argument confuses the recitation of functional elements in a specification with the explicit teaching of discrete physical structures. For example, Samsung asserts that because claim 1 of Family B requires that "the integrated RDC coupled to the integrated PDK by a first signal line for communication," this must mean that the PDK and RDC be two separate entities each with "discrete physical identity". Op. Br. at 17. Family B does not teach that a physical connection for the "signal line" is required or even preferred over other kinds of connections; that specific kind of connection is not a material part of the invention.

Samsung does not explain why the above claim language ("the integrated RDC coupled to the integrated PDK by a first signal line for communication") excludes an embodiment (such as those discussed above) in which this "signal line" is simply one that allows communication among the collective of components that provide the PDK and RDC functions integrated in a hybrid device, like a cell phone. Such an embodiment would, in fact, be consistent with the claim language above, and with the example of a "signal line" providing power that Samsung cites (188 Pat. 13:25-40; 700 Pat. 13:50-65); cell phones often have a single power source (the battery), that provides power to all of the components contained in the phone, which can be connected. In fact, the specification teaches such an arrangement ("the PDK function becomes part of the cell phone . . . using battery power from the cell phone," 188 Pat. 15:42-45; 700 Pat. 16:1-3). Ignoring these portions of the specification that teach otherwise, Samsung attempts to improperly limit the claims to what Samsung believes are "the disclosed embodiments or examples in the specification." *See Linear Technology Corp. v. International Trade Commission*, 566 F.3d 1049, 1058 (Fed .Cir. 2009).

Samsung also misinterprets the figures of the 188 and 700 Patents. Samsung asserts that these figures each "depicts the PDK as simply a box or module". Op. Br. at 16. But other than Figure 10, these figures are all block diagrams. *See* 188 Pat. 2:26-55. A block diagram simply describes the relationships between functional elements of a system; it need not show an actual depiction of any of its components. Here, for example, the boxes in the block diagrams denote the functional relationships of these elements; they are not intended to be indictive of specific physical structures. Similarly, Figure 10 "is a diagram illustrating operation of [a] system", in which functions and functional elements of one example embodiment are described, not discrete physical structures, and certainly not stand-alone, monolithic devices.

Samsung further overstates the importance of examples incorporated by reference. Op. Br. at 17. Those references must of course be read in the context of the remaining specification and claims. Here, the function of a PDK as implemented in the invention is disclosed ("credibility of the system is ensured by the use of a PDK", 188 Pat. 3:48-49; 700 Pat. 4:1-2), but this portion of the specification does not limit the form of a PDK. This is clear from a review of claim 1, which recites a "hybrid device," which, in claim 7, can be a cell phone where the PDK's function is "integrated." Examples incorporated by reference should not be read to limit claims.

### 3. "biometric information" (188:1, 4, 10, 13; 700:4, 14)

| Proxense's Construction | Samsung's Construction |
|---|---|
| No construction necessary, plain and ordinary meaning | the fingerprint, palm print, retinal scan, iris scan, photograph, signature, voice sample, or DNA/RNA information that uniquely identifies an individual |

"Biometric information" is a commonly used term referring to information representing physical or behavioral characteristics unique to an individual.[8] It is not a complex technical term that requires any particular expertise to understand, and a jury will be able to understand its meaning without needing the Court to construe it. Samsung has offered no claim construction canon to justify restricting this term to a delineated list of specific kinds of biometric information. Interpreting "biometric information" according its plain and ordinary meaning, is thus proper.

The specification of the 188 Patent Family uses the term consistently with its plain and ordinary meaning:

> The biometric input 104 comprises a representation of physical or behavioral characteristics unique to the individual. For example, the biometric input 104 can include a fingerprint, a palm print, a retinal scan, an iris scan, a photograph, a signature, a voice sample or any other biometric information such as DNA, RNA or their derivatives that can uniquely identify the individual.

[8] And this meaning is also reflected in technical dictionaries. For example, "biometric verifier" is a "device that helps authenticate by measuring human characteristics." Comprehensive Dictionary of Electrical Engineering (2d Ed.) (PROX_SAMSUNG_003928 at 30) Decl. ¶¶19, Ex. H.

188 Pat. 4:8-16; 700 Pat. 4:28-34. Consistent with the foregoing general definition, the 188 Patent subsequently states, "A biometric profile, for example, includes profile data representing physical and/or behavioral information that can uniquely identify the PDK owner." 188 Pat. 6:42-45; 700 Pat. 6:62-65. Taken together, these statements clearly indicate that the 188 Patent Family uses "biometric information" according to the plain and ordinary meaning. The specific type of biometric information used is not relevant to the invention.

Samsung implies that the above-quoted disclosure from the 188 Patent Family's specification is a defined, limiting list of what "biometric information" can be. *See* Op. Br. at 19. Samsung ignores the fact that treating this exemplary and open-ended disclosure as limiting would improperly read an embodiment from the specification into the claim. And further, Samsung omits the initial sentence "biometric input 104 comprises a representation of physical or behavioral characteristics unique to the individual from the example," and thus fails to address the specification's more expansive disclosure regarding "biometric data."

Samsung's proposal would also violate the doctrine of claim differentiation. Claims 1 and 10 of the 188 Patent do not limit "biometric information" to particular embodiments, while dependent claims 4 and 13 of the 188 Patent do limit "biometric information." *See Liebel-Flarsheim Co. v. Medrad, Inc.* 358 F.3d 898, 910 (Fed. Cir. 2004) (noting that doctrine of claim differentiation is "at its strongest" when "the limitation that is sought to be 'read into' an independent claim already appears in a dependent claim"). The Court should thus reject Samsung's restrictive construction.

**4. "financial information" (188:5, 6, 14, 17; 700:1, 5, 6, 11, 15, 18)**

| Proxense's Construction | Samsung's Construction |
|---|---|
| No construction necessary, plain and ordinary meaning | purchasing account numbers, such as the debit card, ATM card, or bank account numbers |

Proxense submits that the term "financial information" is a common and easily understood

term that a jury will have no difficulty understanding. There is, therefore, no reason to depart from the plain and ordinary meaning of this term here. *See CloudofChange, LLC v. NCR Corp.*, 2020 WL 4004810, at *2 (W.D. Tex. July 15, 2020).

The shared specification of the 188 and 700 Patents details various embodiments in which the financial information is utilized to verify, authorize, and/or complete a transaction. *See e.g.*, 188 Pat. 6:41-59; 8:30-42; 9:21-26; 16:25-28.[9] While the financial information may include "account numbers," the shared specification does *not* limit the financial information to account numbers, as Samsung claims it does. Other information, such as a stand-in for account numbers, would equally qualify as "financial information." The portion of the specification Samsung cites as support for its construction does not even describe the financial information as claimed. Op. Br. at 20. Rather, that part of the specification notes that a "database may be used to validate different types of purchasing means such as a debit card, ATM card, or bank account number." 188 Pat. 5:2-5. Limiting the term "financial information" to "account numbers", as Samsung proposes, would not be consistent with reading the claims in light of the 188 and 700 Patents' shared specification.

**5. "receiver-decoder circuit" (188: 1, 10; 700:1, 11)**

| Proxense's Construction | Samsung's Construction |
|---|---|
| A component or collection of components, capable of wirelessly receiving data in an encrypted format and decoding the encrypted data for processing | a device that provides a wireless interface to the PDK |

The parties' major dispute with respect to this term is whether the "receiver decoder circuit," or "RDC" can comprise a collection of components (as contemplated by Proxense's proposed construction), or whether it is restricted to a monolithic "device" (as Samsung argues).

[9] To the extent the Court finds that the term "financial information" requires some additional clarity, Proxense suggests "information about a transaction, utilized to verify, authorize, or complete a transaction" in light of the cited portions of the specification.

Proxense's proposed construction fully captures the disclosures in the specification.

The name "receiver decoder circuit" indicates a circuit generally, not a discrete entity like a single "device." The inclusion of "device" in its construction is yet another improper attempt by Samsung to limit the scope of a claim term to a single embodiment—here, the physical structure of the block diagrams of the shared specification of the 188 and 700 Patents (*e.g.*, Fig. 13). But "claims generally should not be narrowed to cover only the disclosed embodiments or examples in the specification." *See Linear Technology Corp.,* 566 F.3d at 1058. Accordingly, "[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." *Liebel-Flarsheim Co. v. Medrad, Inc.* 358 F.3d at 906.

Here, every cited figure, with the exception of Fig. 10, in the shared specification of the 188 and 700 Patents is a "block diagram". *See* 188 Pat. 2:26-55. Again, a block diagram simply a describes the relationships between functional elements of a system; it need not show an actual depiction of any of its physical components. The use of boxes in the block diagram's depiction of the receiver decoder circuits in Fig. 13 is merely to denote the functional relationships of these elements; it does not detail specific physical structures. Similarly, Figure 10 "is a diagram illustrating operation of [a] system", in which functions and functional elements of one example embodiment are described, not discrete physical structures, and certainly not stand-alone, monolithic devices.

Samsung also misconstrues the meaning of "direct coupling." Op. Br. at 22. As noted by Samsung, signal line 1104, shown in block diagram of FIG. 11, is described in the specification as a "direct coupling allow[ing] the PDK102a and the RDC204a to communicate control signals and

data for various applications." 188 Pat., 13:26-28. But, again, "FIG. 11 is a *block diagram* of one embodiment of a hybrid device". *Id.*, 2:38-39 (emphasis added). Direct coupling allows the RDC and PDK of the hybrid device to communicate such that the signals are not processed by any intermediary component. Yet, according to Samsung, if the RDC were a collection of components, "there would need to be multiple connections for each of the components and the coupling would not be direct, but indirect". Op. Br. at 22. Samsung's statement is baseless; it has not provided any reason why the "signal line" cannot include multiple connections between the RDC and PDK, or why such an arrangement would provide "indirect," rather than direct, coupling. Additionally, the claims do not limit coupling between the RDC and PDK to a direct coupling. Rather, claim 1 of the 188 and 700 Patents recites: "the integrated RDC coupled to the integrated PDK by a first signal line for communication". All the claim requires is a communicative coupling between the RDC and PDK. Thus, Samsung's argument against Proxense's construction with respect to the type of coupling is a red herring.

Samsung's construction is also flawed as it restricts RDC to "provid[ing] a ***wireless interface.***" Claim 1 of each patent does not so limit the RDC, *i.e.*, "the integrated RDC coupled to the integrated PDK by a first signal line for communication." As such, the RDC may also be capable of a wired, or physical, interface. Accordingly, Samsung's attempt to limit the RDC to providing *only* a wireless interface would improperly read out a limitation from claim 1 of the 188 and 700 Patents.

Separately, the claim term itself includes the concept of a "decoder." Pursuant to the specification, "[g]enerally, the RDC 304 wirelessly receives data from the PDK 102 in an encrypted format and decodes the encrypted data for processing by the processor 306." 188 Pat. 7:11-13. Thus, it is appropriate to construe this term, as proposed by Proxense, to give effect to

the term's requirement for a "decoder," which decrypts encrypted data.

**6. "inheritance information" (188: 9, 18; 700: 9, 19)**

| Proxense's Construction | Samsung's Construction |
|---|---|
| Information passed from a first device to a second device for use by the second device | Information that is received from a predecessor device |

Proxense's construction of "inheritance information" comes directly from the specification of the 188 and 700 patents. FIG. 16 "is a block diagram of one embodiment of a system using the hybrid device for authorization inheritance". 188 Pat. 2:53-55. Three specific types of inheritance (used for authorization inheritance) depicted in FIG. 16 include: (1) Service Inheritance (2) Feature Inheritance, and (3) Personality Inheritance. The specification defines authorization inheritance as "when a first device passes selected information to a second device and the second device then 'inherits' that information for use." 188 Pat., 17:46-49. In accordance with this definition, "inheritance information" would be "information passed from a first device to a second device for use by the second device"—which is Proxense's proposed construction.

Samsung concedes that Proxense's construction "capture[s] the aspect of information transfer from one device to another," "is consistent with the idea of inheritance information," and cites to the same portion of the specification on which Proxense's construction is based. Op. Br. at 24-25. Nonetheless, Samsung proposes a construction that it contends is "consistent with the ordinary meaning of the word 'inheritance.'" *Id.* at 25. This is improper. Samsung does not explain why the definition of "inheritance" recited in Samsung's extrinsic evidence should supplant the plain meaning of the term "inheritance information" as defined by the intrinsic evidence in the specification. *3M Innovative Properties Co. v. Tredegar Corp.*, 725 F.3d 1315, 1321 (Fed. Cir. 2013) (finding that courts may not rely on dictionary definitions where there is a contradiction "found or ascertained by a reading of the patent documents").

Proxense's construction accounts for the predecessor/successor paradigm. Samsung

criticizes Proxense' construction for "missing the notion of a predecessor whose characteristics or features are passed onto a successor". ECF No. at 25. But Proxense's construction *does* entail a "predecessor" (i.e., a first device) and a "successor" (i.e., a second device that will use the information). The "characteristics or features" comprises the proposed "information passed" language, which is passed between devices for use by the second device as required by the specification. 188 Pat. 17:46-49.

**7. "enablement signal" (188: 10-12, 17; 700: 11-13,18)**

| Proxense's Construction | Samsung's Construction |
|---|---|
| A message that enables or authorizes | No construction needed. Alternatively, "a signal that authorizes" |

Proxense has proposed a construction for "enablement signal" because the term only appears in the claims of the 188 and 700 Patents (as opposed to "*authorization* enablement signal" which appears in the common specification). To avoid potential confusion, Proxense submits this construction such that both the "authorization enablement signal" (to which Samsung refers in its construction) *and* "enable signal" in other embodiments described in the specification are understood correctly in their context.

The specification teaches that enablement signals are not necessarily authorization signals. For example, statements in the description and the labeling of FIGS. 14 and 15 indicate a difference between an authorization signal and an enablement signal. With reference to FIG. 14, the shared specification details an embodiment in which "the hybrid device 1102 generate[s] an **authorization or enable signal** on signal line 1406". 188 Pat. 17:2-3.

Proxense's construction further clarifies that the enablement signal comprises a "message" which is consistent with the example set forth in the specification, that "an enable signal on signal line . . . unlock[s] the safety deposit box and allow[s] access to it." The signal must therefore contain some data, or message, indicating that the safety deposit box should be unlocked and

access should be permitted.

Samsung's proposed construction would improperly limit "enablement signal" to "a signal that authorizes", *i.e.*, an "authorization signal." Samsung's construction is based on a single embodiment in the shared specification. The term "authorization enablement signal," which Samsung references in support of its construction, is not referenced in the paragraph describing the FIG. 14 embodiment. An "authorization enablement signal" is only referenced with respect to another embodiment, *i.e*. FIG. 15 (188 Pat., 17:23-26). The FIG. 15 embodiment also references an "enable signal" which is referenced earlier in the paragraph (*id*. at 17:37-41). In contrast to Samsung's proposed alternative construction, the claim itself refers to the enablement signal ***enabling***—not "authorizing." *See* 188 Pat., claim 10; 700 Pat., claim 11.

## III. Conclusion

For the foregoing reasons, the Court should adopt Proxense's proposed constructions.

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Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I, David L. Hecht, hereby certify that on November 17 2021, I served a true and correct copy of the foregoing **PLAINTIFF PROXENSE, LLC's RESPONSIVE CLAIM CONSTRUCTION BRIEF** to counsel of record via ECF.

*/s/ David L. Hecht*
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