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

HBCU MESSAGING US LP, Plaintiff, v. APPLE INC., Defendant.	Case No. 1:24-cv-01199-ADA

DEFENDANT APPLE INC.'S
OPENING CLAIM CONSTRUCTION BRIEF

APPLE 1105
Apple Inc. v. HBCU
IPR2026-00109

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I. INTRODUCTION

The Court should adopt Apple's proposed constructions of the disputed claim terms. Apple's constructions correctly resolve claim term ambiguities based on the surrounding claim language and intrinsic evidence. Apple also establishes that the term "third party provider" is indefinite, as its scope is not reasonably certain in view of the intrinsic evidence.

HBCU Messaging's proposed "plain and ordinary meaning" constructions ignore questions of claim scope that the Court must resolve. For example, do the limitations of the form "wherein X when Y" require that X be the response to Y, or do they cover any co-occurrence of X and Y? The claim language and specification support the former interpretation, not the latter.

HBCU Messaging also resorts to the supposed "plain and ordinary meaning" of the term "third party provider." But HBCU Messaging offers no explanation for what that term means in the context of a patent directed to text messaging. It is unclear what a "third party provider" *provides* and how to assess whether it is a *third party*. The specification provides no answers, rendering the term indefinite.

Although HBCU Messaging has nothing to say about these important limitations, it proposes a more-than-50-word construction for the simple term "cellular core network." No claim construction doctrine supports that unwieldy construction. The term, as used in the specification, simply refers to a network connecting cellular base stations.

Similarly, HBCU Messaging's construction of "bearer" inexplicably replaces that one simple word with 31 more complicated words. Worse, the construction clearly deviates from the specification. For example, the specification says that a "bearer" can be a channel, but HBCU Messaging's construction says otherwise—for no good reason.

Therefore, the Court should adopt Apple's constructions.

II. THE ASSERTED PATENTS

HBCU Messaging asserts seven patents—all in a chain of continuations—that share a common specification but for differences in their Abstracts and Summaries.[1] The patents relate to a messaging service in which a device selects from multiple options for sending messages (*e.g.*, SMS vs. IP and WLAN vs. cellular networks). *See, e.g.*, '127 patent, 2:12–18.

The specification discloses that a wireless device sends a request to a server to check if a destination address corresponds to a packet-switched-messaging subscriber. *See id.*, 2:12–16 ("The wireless device of the sender may determine whether the destination address corresponds to a subscriber of a service for receiving the outgoing message via a packet switched bearer by sending a request via the packet switched base station to a server."). If so, then the wireless device sends the outgoing message using packet switching. *Id.*, 2:12–16; *see also id.*, FIG. 3. If not, the device sends the message "via a short message service (SMS) base station that is independent of the packet switched base station." *Id.*, 2:9–12; *see also id.*, 1:42–46, FIG. 1.

The specification discloses that packet-switched messages can be sent via various transmission means, including wireless local area networks (WLANs) and cellular networks. *Id.*, 2:6–9, 2:62–63. Certain claim limitations specify the means. *See, e.g.*, '600 patent, claim 1 ("a second message is sent to a second receiving mobile phone using the packet-switched message bearer supported by the cellular connection"; "a third message is sent to a third receiving mobile phone using the packet-switched message bearer supported by the WLAN connection").

[1] The asserted patents are U.S. Patent Nos. 8,918,127 ("'127 patent"), 11,012,827 ("'827 patent"), 11,089,450 ("'450 patent"), 11,653,182 ("'182 patent"), 11,653,183 ("'183 patent"), 11,991,600 ("'600 patent"), and 11,991,601 ("'601 patent"). Because the bulk of their specification is shared, Apple cites only to the '127 specification unless stated otherwise.

III. PROPER CONSTRUCTIONS OF THE DISPUTED CLAIM TERMS

A. "Wherein…When" Terms ('127 and '182 Patents)[2]

Apple's Proposed Construction	HBCU Messaging's Proposed Construction
"Wherein X whenever Y"	Plain and ordinary meaning

These limitations all have the form "wherein X when Y" or (equivalently) "wherein when Y, X." The parties agree that they are affirmative claim requirements as opposed to just intended results. The unresolved question is whether X is a required response to Y—as the word "whenever" in Apple's construction conveys—or whether X and Y merely must be capable of co-occurring without any causality requirement. The Court should decide this question of law.

The Federal Circuit has resolved similar issues as a matter of law. *See, e.g.*, *Am. Calcar, Inc. v. Am. Honda Motor Co.*, 651 F.3d 1318, 1340 (Fed. Cir. 2011) (construing "when" to require a "cause-and-effect relationship"). The plaintiff there argued that terms of the form "X

[2] The "wherein…when" terms are below. Text in red indicates a condition Y, while text in blue indicates a response X.

- "**wherein** the wireless device of the sender selects the first transmission mode **when** the indication corresponds to a subscriber of the service" ('127 patent);
- "**wherein**, **when** the selected transmission mode is the first transmission mode, the wireless device of the sender sends the outgoing message as one or more Internet protocol (IP) packets to the wireless device of the recipient via the packet switched WLAN base station" ('127 patent);
- "**wherein**, **when** the selected transmission mode is the second transmission mode, the wireless device of the sender sends the outgoing message as a short message service (SMS) message to the wireless device of the recipient using the destination address via a base station that is associated with a cellular core network that is independent of the packet switched WLAN base station" ('127 patent); and
- "**wherein** the PSMS receives and queues message addressed to a message recipient **when** the message recipient is not connected to the PSMS" ('182 patent).

when Y" merely required that Y occur before X. *Id.* at 1339. The Federal Circuit disagreed, finding that both "[t]he language of the claim itself" and the specification supported construing "'when' to require a cause-and-effect relationship." *Id.* at 1340.

The same is true here. The plain claim language supports Apple's cause-and-effect interpretation. Other limitations use the phrase "capable of" where mere capability of co-occurrence is all that is required. *See, e.g.*, '127 patent, claim 1 ("***wherein*** . . . the wireless device of the sender is ***capable of*** selecting the second transmission mode when the indication does not correspond to a subscriber of the service" (emphasis added)).

The surrounding claim language also supports Apple's position that the recited result always occurs when the recited condition occurs. For example, some claim limitations express that a result need not always occur in response to a specified condition and may further depend on other conditions. *See, e.g.*, '827 claim 1 ("wherein the mobile wireless device selects a packet-switched bearer for transmission . . . ***based at least in part on*** the response indicating that the addressed recipient corresponds to a subscriber of the service" (emphasis added)). Other limitations specify that a result occurs in response to ***two*** conditions instead of just one. *See, e.g.*, '182 claim 17 ("receiving a second response, ***when*** the phone number of the second receiving mobile phone is identified as a subscriber of the PSMS ***and when*** the second receiving mobile phone has an active status with the PSMS" (emphasis added)). Still other limitations recite a plurality of possible results that can occur when a certain condition is met. *See, e.g.*, '827 claim 1 ("***wherein if*** a packet-switched bearer is selected for message transmission via the server that receives packet-switched messages transmitted via the service to recipient devices that correspond to subscribers of the service, the mobile wireless device chooses for message

transmission the packet-switched bearer supported by the WLAN base station ***or*** the packet-switched bearer supported by the cellular base station" (emphasis added)).

Unlike these other limitations, the "wherein…when" limitations do not recite mere capability, nor do they permit results other than the stated result Y if the stated condition X occurs. They instead require that the stated result Y occur ***whenever*** the stated condition X occurs, consistent with Apple's construction. Thus, the doctrine of claim differentiation supports construing the "wherein…when" limitations to be distinct from these other limitations. *See Bd. of Regents of the Univ. of Tex. Sys. v. BENQ Am. Corp.*, 533 F.3d 1362, 1371 (Fed. Cir. 2008) ("Different claim terms are presumed to have different meanings.").

The specification further supports Apple's construction. Regarding the first "wherein…when" limitation of the '127 patent ("wherein the wireless device of the sender selects the first transmission mode when the indication corresponds to a subscriber of the service"), the Abstract discloses sending a packet-switched message whenever a receiving device is a subscriber to packet-switched messaging. *See, e.g.*, '127 patent, Abstract ("The sender's

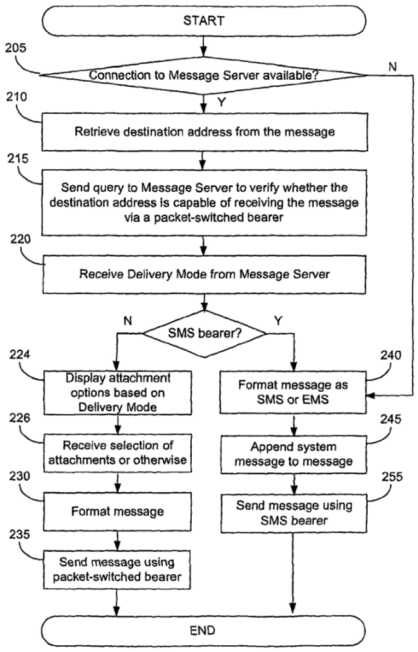

FIG. 3

wireless device determines whether a destination address corresponds to a subscriber of a service for receiving the outgoing message via a packet switched bearer. The sender's wireless device sends, if the destination address corresponds to a subscriber of the service, the outgoing message to the recipient's wireless device via the packet switched base station in the first mode."); *see also* '127 patent, FIG. 3 (sender chooses packet-switching or SMS based on whether the recipient has packet-switched messaging capability). The specification also discloses that the packet-switching versus SMS decision can be based on an additional condition of whether the recipient is active, which is covered by claim 17 of the '182 patent (not at issue here). '182 claim 17 ("receiving a second response, ***when*** the phone number of the second receiving mobile phone is identified as a subscriber of the PSMS ***and when*** the second receiving mobile phone has an active status with the PSMS" (emphasis added)). *Cf. PPC Broadband, Inc. v. Corning Optical Communications RF, LLC*, 815 F.3d 747, 755 (Fed. Cir. 2016) (rejecting the proposition that "each and every claim ought to be interpreted to cover each and every embodiment").

The two remaining "wherein…when" limitations of the '127 patent also support Apple's "whenever" construction. The first reads: "wherein, when the selected transmission mode is the first transmission mode, the wireless device of the sender sends the outgoing message as one or more Internet protocol (IP) packets to the wireless device of the recipient via the packet switched WLAN base station." The second reads: "wherein, when the selected transmission mode is the second transmission mode, the wireless device of the sender sends the outgoing message as a short message service (SMS) message to the wireless device of the recipient using the destination address via a base station that is associated with a cellular core network that is independent of the packet switched WLAN base station." Consistently, the specification discloses using WLAN for packet-switching and cellular for SMS. *See, e.g.*, '127 patent, 2:6–12 (Summary section) ("The

wireless device of the sender may be capable of sending messages via a packet switched base station in a first mode, for example, via a wireless local area network (WLAN) base station. The wireless device of the sender may be capable of sending messages via a short message service (SMS) base station that is independent of the packet switched base station, in a second mode.”).

Apple’s construction for the disputed “wherein…when” limitation of the ’182 patent (“wherein the PSMS receives and queues message addressed to a message recipient when the message recipient is not connected to the PSMS”) comports with the specification as well. The specification states: “If a message is unsuccessfully delivered, it will be queued for later delivery. For example, a message cannot be delivered if the recipient 120 is not connected to the message server 170 when the message is sent.” ’127 patent, 10:18–21. Consistently, Apple’s construction requires queuing messages if the recipient is not connected to the message server.

Therefore, the Court should adopt Apple’s construction of the “wherein…when” terms.

B. “Third Party Provider” (’827 Patent)

Apple’s Proposed Construction	HBCU Messaging’s Proposed Construction
Indefinite	Plain and ordinary meaning

A claim term is indefinite if there is no reasonable certainty as to its scope when viewing it in light of the intrinsic evidence. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). The term “third party provider,” which appears only in the ’827 patent, is indefinite under that standard. The claims and specification do not make reasonably certain what a “third party provider” *provides* or how to assess whether it is a *third party*. While HBCU Messaging contends this term should be given its “plain and ordinary meaning,” HBCU Messaging offers no evidence that “third party provider” is a term of art in the field of text messaging.

Courts and parties have recognized that the term “provider” as used in computer

networking patents requires construction. *See, e.g.*, *Kroy IP Holdings, LLC v. Safeway, Inc.*, No. 212-CV-00800, 2014 WL 2528645, at *18–20 (E.D. Tex. June 4, 2014), *aff'd*, 639 F. App'x 637 (Fed. Cir. 2016). Both parties in *Kroy* agreed that "'provider' refers to an individual or company that provides something," but they also acknowledged the need to identify that *something* in their proposed constructions. *See id.* at *19. The court agreed that a construction of "provider" required identification of that *something*. *See id.* at *19–20. Based on its review of the intrinsic evidence, the court construed "provider" as an "individual or company that offers or provides an incentive program or provides awards associated with an incentive program." *Id.* at *20.

Here, by contrast, the intrinsic evidence does not identify the *something* that a "third party provider" provides. The claims are of no help. For example, claim 1 of the '827 patent requires that message content "intended for a third party provider" be forwarded to that provider and that the message be "derived at least in part from a random number." These limitations say nothing about what a "third party provider" provides.

The specification is also uninformative. The specification uses the term "third party provider" only in the Abstract and Summary, which the applicants added during prosecution of the '827 patent (despite it being a continuation). Moreover, the Abstract and Summary merely parrot the language of the patent's claims. *See* '827 patent, Abstract, 2:14–27. Thus, they too provide no assistance in construing "third party provider."

Elsewhere, the specification briefly discusses a "third-party ***content*** provider," but even that brief description lacks reasonable clarity. The specification does not define that term and says only that third-party content providers may provide "information concerning where to buy [a] product or its latest promotion" or a "weather forecast." In any event, the applicants used a

different, broader term for the claims—"third party provider"—so they presumably had a different meaning in mind.

This indefiniteness of the term "third party provider" is exacerbated by the fact that the specification offers no guidance on how to decide whether a "provider" is a *third party*. The sender, the recipient, the cellular network provider, and the packet switched network provider are all plausible entities against whom a relationship with the provider could be assessed, but the specification does not say which possibility applies.

Because determining the scope of "third party provider" would require pure guesswork, the term should be found indefinite.

C. "Bearer" (Multiple Patents)

Apple's Proposed Construction	HBCU Messaging's Proposed Construction
"A communication channel or protocol"	"A protocol running on a channel for transmitting data including SS7, GSM SS7, HSDPA, WCDMA, CDMA2000, GPRS, Bluetooth, WiFi, WiMax, or any other WPAN, WLAN, or WWAN wireless data transfer protocol"

The parties seemingly agree that a bearer is at least a communication protocol but disagree as to what else it includes. Apple's proposed construction adopts the meaning set forth in the intrinsic evidence. HBCU Messaging's construction adds superfluous language that goes beyond what the patentee described and that does not help inform the meaning of the term.

The Asserted Patents define a "bearer" as either a communication channel or protocol, as Apple proposes. *See, e.g.*, '127 patent, 2:61–62 ("The SMS bearer may be a conventional GSM SS7 signalling ***channel***." (emphasis added)), 7:26–35 ("For example, . . . an SMS bearer may be an SS7 signalling ***channel*** while a packet-switched data bearer may be a shared transmission ***channel*** . . . . The packet-switched data bearer ***may also be*** a Bluetooth, WiFi, WiMax or any

other WPAN, WLAN, or WWAN wireless data transfer ***protocol***." (emphasis added)). A "bearer" is not merely, as HBCU Messaging proposes, a "protocol . . . for transmitting data." That proposed construction overlooks that a "bearer" can also be a channel.

HBCU Messaging's construction is also unnecessarily verbose. There is no good reason to present jurors with 12 examples of messaging protocols.

Therefore, the Court should adopt Apple's construction.

D. "Cellular Core Network" ('127 Patent)

Apple's Proposed Construction	HBCU Messaging's Proposed Construction
"A network connecting cellular base stations"	"One or more entities responsible for: maintaining a database of subscriber information for a cellular network, for example, a home location register (HLR) and/or a home subscriber server (HSS); providing access to a short message service center (SMSC) or multimedia message (MMS) server; and providing Internet access to one or more mobile devices via at least mobile operator base stations"

While only HBCU Messaging identified "cellular core network" as a term needing construction, Apple does not oppose construing it to help jurors understand its meaning. Apple does, however, object to HBCU Messaging's baseless importation of numerous limitations that complicate rather than elucidate the term's meaning.

HBCU Messaging agrees with Apple that a "cellular core network" connects mobile base stations. Both intrinsic and extrinsic evidence support that construction. No legal doctrine or intrinsic evidence supports HBCU Messaging's attempts to narrow the term further.

1. Apple's Proposed Construction Is Supported by Intrinsic and Extrinsic Evidence

The intrinsic evidence confirms that "cellular core network" means the portion of a cellular network that connects cellular base stations to each other. Figure 1 shows that "core network 140" (shown in blue) is the backbone of the cellular network. Cellular base stations 130 and 150 (green) are connected to each other via core network 140.

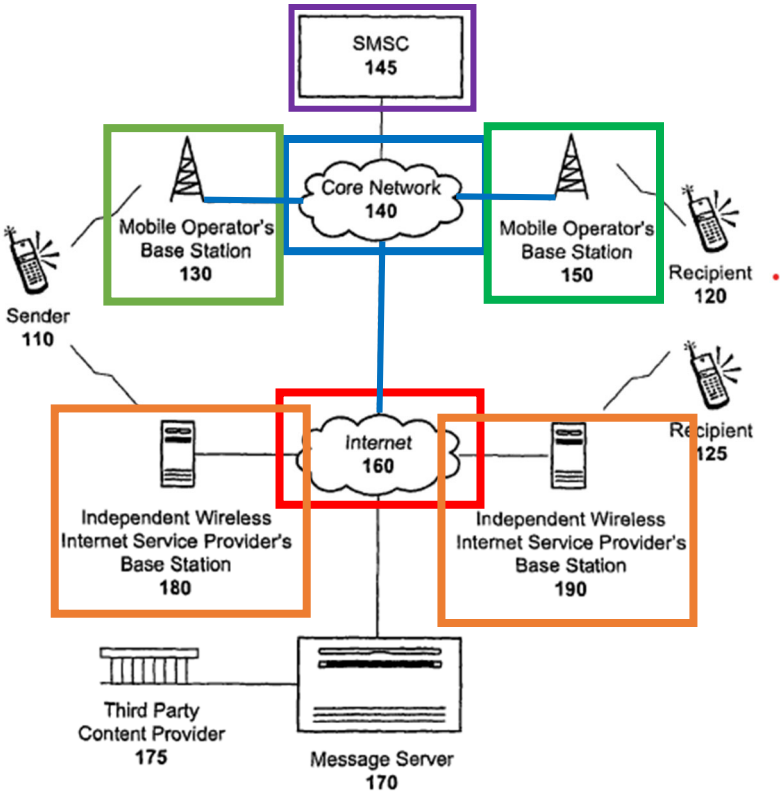

FIG. 1

The specification distinguishes this cellular core network from the "network provided by an independent mobile Internet service provider" (*i.e.*, the Internet). '127 patent, 7:39–42. Figure 1 shows that ISP base stations 180 and 190 (orange) are connected by Internet 160 (red).

Claim language reinforces that a "cellular core network" connects cellular base stations. For example, '127 claim 1 recites that "the wireless device of the sender sends the outgoing message as a short message service (SMS) message to the wireless device of the recipient using the destination address ***via a base station that is associated with a cellular core network***." *Id.*, 12:14–19 (emphasis added).

Extrinsic evidence further supports Apple's construction. For example, a 2008 version of Newton's Telecom Dictionary describes a "core network" as "the backbone of a carrier network." (Malloy Decl., Ex. A (*Newton's Telecom Dictionary* (24th ed., 2008) at 267).)

2. HBCU Messaging's Proposed Construction Is Unsupported

Conversely, no intrinsic evidence supports HBCU Messaging's lengthy construction. The specification never mentions a "database of subscriber information for a cellular network," a "home location register (HLR)," or a "home subscriber service (HSS)," nor does the specification suggest that the cellular core network "provid[es] access to a . . . multimedia message (MMS) server." That alone should defeat the construction.

Extrinsic evidence further undermines HBCU Messaging's construction. For example, *Newton's Telecom Dictionary*'s definition of "core network" mentions none of the foregoing elements of HBCU Messaging's construction.

While HBCU Messaging's use of the word "examples" in its construction suggests that these are elements are optional, listing optional elements in a construction would only serve to confuse jurors. *See C&M Oilfield Rentals, LLC v. Apollo Lighting Sols. Inc.*, No. 6:21-CV-00544 (ADA), 2022 WL 1050318, at *6 (W.D. Tex. Apr. 7, 2022) (declining to include examples in embodiment despite inclusion of "e.g." due to risk of jury confusion). Accordingly, the Court should adopt Apple's construction of this limitation.

IV. CONCLUSION

Apple's proposed constructions are rooted in the intrinsic and extrinsic evidence. They clarify claim language for jurors, correctly resolve ambiguities where possible, and otherwise hold claim language indefinite. By contrast, HBCU punts on the meaning of the terms most requiring construction and provides confusing, unsupported constructions for the remaining ones. For these reasons, the Court should adopt Apple's constructions.

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing was served upon all counsel of record via the Court's ECF system on September 22, 2025.

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