Northern District of California United States District Court

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# UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA UNWIRED PLANET, LLC, Plaintiff, v. APPLE INC. Defendant.

Case No. 13-cv-04134-VC

SUMMARY JUDGMENT ORDER Docket No: 311, 317

# **I. Introduction**

Unwired Planet has sued Apple for patent infringement. Unwired asserts claims from four different patents: U.S. Patent No. 6,317,831 ('831 patent), U.S. Patent No. 6,532,446 ('446 patent), U.S. Patent No. 6,646,260 ('260 patent), and U.S. Patent No. 6,321,092 ('092 patent). The parties have cross-moved for summary judgment on various issues.

Apple's motion for summary judgment of noninfringement is granted with respect to the '831 patent, the '446 patent, and the '260 patent. This means several of the parties' summary judgment arguments on those patents are moot. Further, Apple has informed the Court that in the event the Court grants Apple's motions for summary judgment of noninfringement, Apple will no longer pursue its invalidity counterclaims with respect to those patents at the upcoming trial, provided that it can still pursue them if the case is remanded on appeal. Therefore, the only 24 remaining patent-in-suit will be the '092 patent.

25 And on the '092 patent, Apple's motion for summary judgment of noninfringement is denied with respect to literal infringement, but is granted with respect to induced and contributory 26 27 infringement. Unwired's motion for summary judgment on Apple's invalidity defense based on 28 anticipatory prior art is granted. And both parties' motions for summary judgment on Apple's on-

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sale bar defense are denied.

#### II. '831 Patent

The '831 Patent describes a technique for more efficiently enabling secure data transactions using a narrowband channel. Each of the asserted claims – claims 17, 23, and 25 – requires a wideband channel to first exchange security information, and a narrowband channel to then transmit the relevant data over the secure connection. The primary difference between the two types of channels is the rate at which they transfer data. At claim construction, the parties agreed to the Court's proposed construction of narrowband channel as "channel with a meaningfully lower data transfer rate or bandwidth than the wideband channel."

Unwired Planet alleges that the Apple Push Notification System (APNS) infringes the asserted claims of the '831 patent. APNS is an Apple feature that allows app providers to send push messages to an iOS device via APNS servers. Rather than connecting with multiple app provider servers, an iOS device need only connect to the APNS servers, because the app provider servers send messages to the APNS servers, which then send messages on to the iOS device. It is undisputed that APNS servers send push notifications to iOS devices using TCP/IP protocols, which are the standard communication protocols for transmitting data over the Internet.

18 When an APNS server sends a push notification to an iOS device, the message includes 19 both a "payload" and a "header." The payload is the portion of the message that contains the 20information to be presented to the user (if the push notification is from StubHub, for instance, the payload might say "Tickets for tonight's Golden State Warriors game"). The header includes 21 information related to accurate delivery of the message, such as the identity of the iOS device that 22 23 should receive the message.

24 Apple contends that APNS does not meet the "narrowband channel" claim limitation as a 25 matter of law. Unwired responds that the channel used to send push notification messages from the APNS servers to an iOS device is a narrowband channel, and it contends that APNS uses a 26 27 wideband channel when APNS exchanges security information with an iOS device that later 28 allows the APNS servers to send the push notification to the correct device.

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As a threshold matter, to prevail on this infringement claim Unwired must be able to prove that APNS uses two separate channels, as required by the '831 patent. It's debatable whether Unwired has provided sufficient evidence of this. There is no dispute that the exchange of both the security information (performed by the alleged wideband channel) and the push notification message (performed by the alleged narrowband channel) occur over a single Internet connection using TCP/IP protocols, which seems to belie the suggestion that they occur over different channels.

Unwired contends these APNS channels are different because they have different endpoints. Unwired's expert, Dr. Mark Jones, claims the security information channel (alleged wideband channel) runs only from the iOS device to the APNS servers, whereas the push notification channel (alleged narrowband channel) extends back to the application provider servers. And he contends this makes them different channels. But as Apple correctly points out, "the asserted claims require *both* channels to connect to the same 'server' with the same 'client,' and Unwired contends that the 'server' is the APNS server and the 'client' is the iOS device." Therefore, all that matters is the channel between the APNS servers and the iOS device; the communication that extends from the APNS servers to the application provider servers is not part of the accused system. And Unwired has given no real explanation (or evidence) of how the backand-forth communication between the APNS servers and the iOS device occurs over different channels.

But even assuming for the sake of argument that APNS does use two separate channels, these channels cannot be distinguished based on meaningfully different data transfer rates, which is the fundamental difference between a narrowband and wideband channel in the '831 patent. Dr. Jones asserts that push notification messages are sent at a lower data transfer rate than the security information, but his analysis is based on a faulty premise, and once this is recognized it becomes clear that there is no genuine issue of material fact.

Dr. Jones' analysis is as follows: Apple limits the size of push notification messages to 256 bytes, a limitation that is not present when the APNS servers exchange security information with an iOS device. This size limitation results in a higher percentage of header information than is

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typically present in TCP/IP data transmissions. Further, header information should not be considered "data"; rather, only the payload – the portion of the push notification that includes the actual message to the user – should be considered data. Therefore, because the push notification contains significant overhead in the form of header information, and because header is not data, the payload (or data) reaches the iOS device at a slower rate than it otherwise would in a message with a lower percentage of header information, and thus the data transfer rate is meaningfully lower.<sup>1</sup>

At oral argument, counsel for Unwired analogized its infringement theory to coal trucks transporting coal from Point A to Point B. If the road between the two points only allows three coal trucks to travel at one time, and if each of those trucks includes a large engine that takes up space that could otherwise be filled with coal, then the overall amount of coal reaches Point B more slowly than if the road allowed ten trucks to travel at a time, or if the trucks had smaller engines and thus more space for coal. Accordingly, under this theory, the transfer rate of coal is meaningfully lower due to the overhead of the large engines and the restrictions on the number of trucks.

Rather than supporting Unwired's infringement theory, this analogy shows why APNS does not infringe. First, the scenario assumes a need to deliver more coal than what can be carried on three trucks. But this is not the way APNS works. A push notification is a self-contained message; it includes all the content that an application provider sends to an iOS device. It is not as if an application provider intends to send 1000 bytes of data and therefore must send four push notifications to the iOS device. Rather, one "trip" from the APNS servers (which receive the data from the app provider servers) to the iOS device contains the total amount of data.

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<sup>&</sup>lt;sup>1</sup> It is not clear why header information should not be considered data; after all, it is a critical part of the push notification message and is necessary to ensure the push notification gets delivered to the correct iOS device. However, Unwired points to a section of the '831 Patent, as well to a sentence in a technical reference, both of which might suggest that header should not be considered data. So for purposes of summary judgment, the Court will assume that header information is not data.

# III. '446 Patent

### A. Noninfringement

The '446 patent discloses an invention for extending speech recognition capabilities to mobile devices. Under the method taught by the patent, a user speaks into a mobile device, the user's speech is sent over a voice channel to a server, the server converts the speech into a symbolic data file, and the server then sends the data file back to the mobile device over a data channel. The use of two separate channels – a voice channel for sending voice input from the device to the server, and a data channel for sending the data file from the server back to the mobile device – is a core feature of the invention. As the Court noted in its claim construction order,

Second, the coal analogy is not reflective of the '831 patent because the analogy does not speak to the rate at which the trucks travel on the road; instead, the hypothetical lower coal transfer rate relies solely on the characteristics of the trucks themselves (bigger engines) and on a limitation restricting the number of trucks. Dr. Jones' infringement analysis suffers from the same defect. He opines that data-size restrictions and overhead in the form of header result in push notifications reaching an iOS device at an overall lower transfer rate. But this analysis has nothing to do with the *capacity* of the alleged narrowband channel to transfer data at a lower rate. Yet that is precisely how a narrowband channel is defined in the '831 patent. The '831 patent states, "As an example, narrowband channels can transfer data at a rate of about 400 bits per second (bps), while wideband channels can transfer data at a rate of at least 14400 bps." '831 Patent, 8:12-14. The distinction between a wideband and narrowband channel is the different data transfer abilities of the channels themselves. Unwired has introduced no evidence to suggest that (assuming there are really two channels) the data channel between APNS servers and an iOS device for delivering push notifications itself is not capable of transferring data at a rate similar to that of the channel between APNS servers and an iOS device used to exchange security information.

Accordingly, there is no evidence that APNS meets the "narrowband channel" limitation of the asserted claims. Apple's motion for summary judgment of noninfringement of the '831 patent is therefore granted.

"[t]he patent consistently maintains the distinction between voice input being sent over a voice channel to the server device, and a data file which is then sent back to the mobile device over a data channel." Therefore, the court construed "voice input" as "speech provided over a voice channel."

Unwired has accused Apple's "Siri" feature of infringement of claims 15 and 35 of the '446 patent. Much like the '446 patent, Siri provides for server-based speech recognition; a user speaks into an iOS device, that speech is sent to the Siri servers, and then text is returned to the iOS device. But Apple argues that unlike the '446 patent, Siri does not use a voice channel to transmit voice input from the device to the servers. Instead, Apple argues, Siri sends voice input over a data channel, and does so using TCP/IP protocol, which, as mentioned in the previous section, is a standard protocol for sending data (not voice) over the Internet. As Apple notes, this is the same protocol Siri uses to send the data file *back* from the Siri servers to the iOS device.

There is no factual dispute about how Siri works, and Unwired acknowledges that Siri sends voice input using TCP/IP protocols. Nonetheless, Unwired argues, Siri uses a voice channel because the channel between an iOS device and Siri servers has certain qualities that one normally sees in a voice channel. This of course begs the question: what is a voice channel? The patent uses the term no less than 16 times, and uses it in a way that suggests that one skilled in the art would know what it is. Further, the patent states that a voice channel "is generally established and coordinated using the infrastructure and procedures generally known in the art for setting up a phone call." '446 Patent, 6:21-24. The patent also suggests, however, that other types of voice transmission can potentially be sent over a voice channel. For instance, the patent teaches that "palm sized computing devices and personal digital assistants with voice transmission and/or reception capabilities" can send voice input over a voice channel to an outside server. *Id.* at 5:1-3.<sup>2</sup>

 <sup>&</sup>lt;sup>2</sup> Apple's expert, Mr. Rysavy, provided examples of how, at the time the patent was prosecuted, these devices could access the same voice channels used for phone calls. So it may be that the only example the patent provides of voice channel transmission is a phone call. But the Court need not resolve that question to rule on the summary judgment motion.

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Unwired urges the Court to think about different types of transmissions as existing on a spectrum; some types of transmissions clearly use voice channels, others clearly use data channels, and still others are somewhere in between. As Unwired states, different types of transmissions "lie on a spectrum between a data transfer, on one end, and a telephone call over a voice channel, on the other end. Determining where a voice channel ends and becomes a data channel requires an overall assessment of these factors." And according to Unwired, this overall assessment involves a "fact-intensive multifactor analysis."

Unwired's argument seems to belie the teachings of the '446 patent, which suggests that a voice channel is a fairly simple and well-understood concept. Indeed, the only description of a voice channel from the patent is the basic one mentioned above: a voice channel "is generally established and coordinated using the infrastructure and procedures generally known in the art for setting up a phone call." But regardless of whether Unwired is correct about the need for a multifactor analysis, there must still be some discernible limit as to what constitutes a voice channel. In other words, even if there is a spectrum where it is obvious that certain transmissions, such as cell phone calls, use a voice channel, while for other transmissions that determination is a closer call, there nonetheless must be a recognizable line that separates what is a voice channel from what is not. A voice channel must be an actual, identifiable type of channel, not some ambiguous channel that can be labeled a voice channel merely because it transports voice. Otherwise, the '446 patent, which teaches the use of a voice channel, would be rendered meaningless.

20 This is underscored by a passage in Unwired's supplemental brief, which attempts to 21 explain how one would decide whether something is a voice channel or a data channel:

> For example, one can analyze possible hypothetical variations of the example offered above of downloading a MP3 file of oral arguments recorded the day before. A person of ordinary skill might come to a different conclusion if the user were listening to the MP3 file as it downloaded, or if it was being streamed instead of downloaded, or if it was being streamed live during oral arguments, or if it was being streamed live via Skype during the oral arguments, or if the user listened and responded using Skype, or if the user is listening and responding by dialing in over a normal telephone line. Each of these variations presents a slightly different analysis, possibly yielding different results dependent on the specific details of the hypothetical. All of these circumstances lie on a spectrum between

a data transfer, on one end, and a telephone call over a voice channel, on the other end. Determining where a voice channel ends and becomes a data channel requires an overall assessment of these factors.

If Unwired is correct that the distinction between a voice channel and a data channel in the '446 patent is so blurry, it seems unlikely that a person skilled in the art could read the patent and determine (for purposes of avoiding infringement) what is and is not a voice channel. This would raise a serious concern that the patent could be invalid for indefiniteness. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120 (2014).

But assuming for the sake of argument that the '446 patent delineates a "spectrum" between "voice channel" and "data channel," and even assuming, as Unwired asserts, that there is no clear dividing line on this spectrum, no reasonable juror could conclude, on this record, that Siri uses a "voice channel" as that term is used in the patent. Even adopting Unwired's construct, a voice channel is defined by how it treats voice communications. Namely, a voice channel transmits voice without delays; otherwise, two participants on a cellular phone call – the undisputed classic example of a voice channel – would be unable to communicate effectively. As explained by Apple's expert, Mr. Rysavy, a voice channel accomplishes this goal in three ways. First, it uses different transmission protocols from data channels. Specifically, voice channels use shorter transmission intervals, typically 20 millisecond intervals, to ensure that voice is transmitted without delay. Second, voice channels use different error correction mechanisms than data channels. A voice channel is more focused on transmitting information quickly, whereas a data channel is more focused on transmitting information accurately. As a result, a voice channel will tolerate errors in voice packets, because to retransmit those packets would cause delay. A data channel, on the other hand, will retransmit a data packet that contains errors, even if that retransmission causes delay, because retransmission is necessary for accuracy. Third, voice channels receive dedicated network resources from wireless carriers such that voice channels are prioritized over data channels. This ensures that voice transmission occurs first, and is not disturbed by data transmission. Otherwise, voice transmission could be interrupted and delayed.

With this understanding of some of the hallmarks of a voice channel, no reasonable juror could conclude that Siri transmits voice input over a voice channel, because it is undisputed that

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the Siri channel does not include these features. With respect to transmission protocols, whereas a voice channel typically uses 20 millisecond intervals for transmitting voice, Siri records 200 milliseconds of voice input before transmission to the Siri servers. As for error correction mechanisms, there is no evidence that Siri transmits packets including errors to ensure real-time delivery. And the Siri channel does not receive any priority from wireless carriers or any dedicated network resources to ensure real-time transmission. In fact, the opposite is true – wireless carriers treat Siri usage as data usage, not as voice minutes, and Siri only works if an iOS device is connected to the Internet.

Not only does the Siri channel lack these features, but, as even Dr. Jones acknowledges, TCP/IP, the protocol used to send voice input over the channel, "is not concerned with whether it is transmitting voice or non-voice data." This indicates that the channel does not treat voice and non-voice data differently, as would be the case if the channel was a voice channel. What's more, the '446 patent itself identifies TCP/IP as the type of protocol that can be used on the data channel to send input back to the mobile device, not as the protocol that can exist on the voice channel.

Against all this, Unwired contends that the channel between an iOS device and the Siri servers is a voice channel, both because a voice channel *can* exist over TCP/IP protocols, and because the Siri channel includes a number of voice channel characteristics. As to the first point, Unwired points to Skype and other Voice-over-IP (VoIP) technology as examples of TCP/IP protocols being used to transmit voice over a voice channel. But reference to VoIP is largely irrelevant. No VoIP services use TCP in normal operation; rather, they only use TCP if the preferred protocol is not available, presumably because TCP/IP protocols do not include any of the transmission protocol, error correction mechanisms, or prioritization properties that are necessary for voice to be transmitted without delay. Therefore, it's not clear that a VoIP communication which uses TCP/IP even uses a voice channel, at least as that term is used in the '446 patent. Further, it is undisputed that Siri is not a VoIP service, so even if VoIP did stand for the general idea that a voice channel and TCP/IP could coexist, it would not shed any light on the type of channel that Siri uses.

Unwired also argues that both voice input from Siri as well as cellular calls from an iOS device, the latter of which obviously uses a voice channel, are sent over the same cellular channel. It appears Unwired is referring to the fact that cellular networks provide an "uplink channel" for all outgoing communications and a "downlink channel" for incoming communications. So from this standpoint, of course voice calls and Siri speech input both use the "uplink channel" because they are both forms of outgoing communication. But this has nothing to do with whether Siri uses a voice channel. And more to the point, in his deposition, Dr. Jones indicated that the "uplink channel" is not, on its own, what he alleges to be the voice channel. Therefore, this argument does nothing to support the contention that Siri uses a voice channel.

Unwired also contends that Siri uses a voice channel because it configures the channel to transmit speech, and this configuration is a characteristic of a voice channel. Here, Unwired relies on Siri's use of Speex codec to encode and packetize the user's voice, which, according to Unwired, is a type of encoding and packetization designed for VoIP technology. But this evidence merely goes to how an iOS device encodes the user's speech prior to transmission, not to the type of channel used between the iOS device and the Siri servers.

Finally, in his opening report, Dr. Jones makes a conclusory assertion that Siri constantly streams the user's speech, including silent pauses, and suggests that this "streaming" is indicative of a voice channel. But there is no evidence as to what Unwired means by "streaming," or how this type of streaming is any different from the way that data is streamed over a data channel. In short, this evidence, like the rest of the evidence presented by Unwired Planet, is insufficient to lead a reasonable juror to believe that a channel which uses TCP/IP protocols, a channel which does not distinguish between voice and non-voice data, and a channel which does any include any of the properties needed to ensure real-time transmission, is a "voice channel" as that term is used in the '446 patent.

Accordingly, because Siri does not use a voice channel, Siri does not infringe the '446
patent, and summary judgment is granted for Apple.

#### B. Invalidity

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Apple has also moved for summary judgment of invalidity on the '446 patent. Apple alleges that U.S. Patent No. 5,956,681 (the "Yamakita patent") is anticipatory prior art. Like the '446 patent and like Siri, the Yamakita patent teaches a system in which a mobile device sends voice input to a server to convert that speech into text and then send it back to the mobile device. But unlike the '446 patent, the Yamakita patent sends speech input to the server using TCP/IP protocols, the same protocols used by Siri. As discussed extensively in the previous section, this is not the approach taken by the '446 patent; rather, under the '446 patent, speech travels from the mobile device to the server over a voice channel. Therefore, the Yamakita patent does not anticipate the '446 patent, and Apple's motion for summary judgment of invalidity is denied.

#### IV. '260 Patent

The '260 Patent discloses an invention for "provisioning" the features and services available on a mobile communications device, and the Court has construed "provisioning" as "enabling or modifying communication capabilities." Unwired has asserted claim 1, "[a] method for provisioning a two-way mobile communications device," which comprises, in relevant part, the following two steps: "[1] receiving user information required to establish a user account . . . [2] generating a provisioning request comprising the user information and the user's selection."<sup>3</sup> '260 Patent, 9:19-20, 27-28.

Unwired accuses Apple of infringement via the App Store, which allows a user of an iOS
device to purchase and download applications for her device. To purchase apps from the App
Store, a user must have an iTunes account, which "utilizes a user's Apple ID." As Apple notes,
"[a]n Apple ID is the email address you use as a login for just about everything you do with
Apple, including . . . downloading apps from the App Store."

Dr. Jones argues that the claim term "user account" is met by an Apple user's iTunes account. When a user sets up an iTunes account, she provides certain "user information required

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- <sup>3</sup> Unwired Planet has also asserted Claim 16, which depends from Claim 1.

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to establish" the account: an email address which serves as the Apple ID, a password, birth date, country or region, challenge questions and responses, and billing information. If a user is signed into iTunes and has recently provided her password, then when she requests to purchase an app from the App Store, the iOS device generates a buyProduct request for the app. If the user is not signed into iTunes, then the device generates an "authenticate" request, which requires the user to enter her Apple ID and password, and then a buyProduct request. Because the buyProduct request 6 includes the user's selection of an app as well as information about that user – namely, an X-token which includes the user's Apple ID password in the form of a hash of that password – Unwired Planet argues that the buyProduct request meets the claim limitation of "generating a provisioning 10 request comprising the user information and the user's selection."

But there's one problem – the user information included in the buyProduct request (the alleged "provisioning request") is not the same user information required to establish the iTunes account (the alleged "user account"). To establish an iTunes account, a user provides the information recited above (email address for use as Apple ID, password, birthdate, etc.). The user information in the buyProduct request is different. It includes a DSID, which is a unique identifier of an Apple user's account generated by Apple servers, as well as an X-token, which includes an encryption of the user's Apple password in the form of a hash. The type of user information contained in a buyProduct request is not a disputed point. Instead, Unwired contends that the hash of the password satisfies the claim limitation of "user information" because the hash is effectively the same thing as the user's password, just with "a mathematical function applied to [it]."

But this argument is insufficient in multiple respects. The asserted claim requires that "the user information" in the provisioning request be the same "user information required to establish a user account." This is evident because there is no type of "user information" mentioned in the claim other than that needed to establish a user account, because the inventor's use of "the" in "the user information" suggests a reference back to this earlier-cited user information needed to establish the account,<sup>4</sup> and because the same term should be given a consistent meaning within the

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<sup>&</sup>lt;sup>4</sup> See, e.g., Motorola Mobility LLC v. ITC, 535 fed. Appx. 971, 975 (Fed. Cir. 2014) ("[T]he claim requires that 'the change' be communicated to the fixed portion of the wireless network. Since the

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same claim.<sup>5</sup> Yet here, the user information in the alleged provisioning request is not the same user information required to establish a user account. The hash of a password in a buyProduct request is a proxy for the user's Apple ID password. As Dr. Jones testified, one can't even figure out the password from the hash. At best, therefore, Unwired has a doctrine of equivalents argument, not a literal infringement argument. But Unwired has only alleged literal infringement against the App Store.

The above discussion applies to the situation where a user is already signed into iTunes and attempts to purchase a product from the App Store. Unwired also argues that infringement occurs when a user is *not* signed into iTunes, which results in the device generating both an authenticate request, in which the user enters her Apple ID and password, and then a buyProduct request. Unwired alleges that the combination of the authenticate request and the buyProduct request is a "provisioning request." But an authenticate request and a buyProduct request are indisputably two separate requests, even if they occur successively without any action by the user, so they cannot be combined to meet the claim limitation of "provisioning request." And neither of these requests contains both the user's selection and the user information needed to establish a user account. As explained, the buyProduct request does not contain the user information needed to establish a user account, and while the authenticate request contains at least some, but certainly not all, of this user information (Apple ID and password), it does not contain the user's selection. Accordingly, because the user information in the buyProduct request is different from the user information needed to establish an iTunes account, the App Store does not meet the claim limitation of "generating a provisioning request comprising the user information and the user's

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meaning).

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only antecedent basis for this change derives from the phrase 'a change in accessibility,' the change 23 that causes an update to the application registry must be the same change that is communicated to the fixed portion of the wireless network."). 24

<sup>&</sup>lt;sup>5</sup> See, e.g., Digital Biometrics, Inc. v. Identix, Inc., 149 F.3d 1335, 1345 (Fed. Cir. 1998) ("[T]he same word appearing in the same claim should be interpreted consistently."); Phonometrics, Inc. v. Northern Telecom, Inc., 133 F.3d 1459, 1465 (Fed. Cir. 1998) ("A word or phrase used 26 consistently throughout a patent claim should be interpreted consistently."); Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Int'l, Inc., 389 F.3d 1370, 1377 (Fed. Cir. 2004) (the same term appearing in different portions of the claim should be presumptively given the same

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selection." Summary judgment of noninfringement is granted to Apple with respect to the '260 patent.<sup>6</sup>

#### V. '092 Patent

### A. Noninfringement

The '092 patent discloses a technology for identifying the location of mobile terminals, such as cell phones. To more accurately locate a mobile terminal, the invention gathers location inputs from multiple sources, and then responds to a location request by providing the location information that is responsive to that request. The patent refers to the sources of the location inputs as "location finding equipment." Unwired Planet alleges that the location-finding technology of iOS devices infringes claim 20 of the '092 patent, which is a method claim comprising, in relevant part, "receiving a plurality of device dependent location inputs provided by said location finding equipment." '092 Patent, 16:19-20.

Apple has moved for summary judgment on the ground that the accused system does not use a plurality of location inputs; rather, Apple argues, its system only uses a single location input: GPS. But in his expert report, Dr. Jones identified a number of different pieces of information which he alleges are part of Apple's system and which Dr. Jones identifies as "location inputs." This is best illustrated by the chart which appears on pages 79-80 of Dr. Jones' opening expert report.

In its motion for summary judgment, Apple only focuses on two of these inputs – "BSSID," an identification number associated with a Wi-Fi router, and "cell ID," an identification number associated with a cell tower. Apple contends that the remaining pieces of information in

<sup>&</sup>lt;sup>6</sup> Because there is no direct infringement of the '831, '446, or '260 patents, Apple's motion for summary judgment is also granted on these patents with respect to indirect infringement. *See, e.g., In re Bill of Landing Transmission and Processing Sys. Patent Lit.*, 681 F.3d 1323, 1330 (Fed. Cir. 2012) ("a claim of indirect infringement can only arise when there is direct

<sup>infringement); see also Limelight Networks, Inc. v. Akamai Techs., Inc., 134 S. Ct. 2111, 2117
(2014) ("our case law leaves no doubt that inducement liability may arise if, but only if, [there is].
direct infringement") (internal citation omitted); Aro Mfg. Co. v. Convertible Top Replacement</sup> 

 <sup>27</sup> Co., 365 U.S. 336, 341 (1961) ("if there is no direct infringement of a patent there can be no contributory infringement").

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Dr. Jones' chart are either already covered by Apple's noninfringement arguments because they are the same type of information as BSSID and cell ID – namely, equipment identifiers – or else Unwired has presented no evidence that Apple actually uses that information as part of its location-finding technology in iOS devices. It is not clear that Apple is correct, and therefore summary judgment is denied on this ground alone, because Apple has failed to demonstrate that all of the inputs identified by Dr. Jones are not in fact location inputs.

But even with respect to BSSID and cell ID, there is a material dispute about whether they meet the claim limitation of "location input." At claim construction, Apple proposed construing "location input" as "determinations of the location of a mobile terminal," but the Court found this construction "suggests a definiteness which might be misleading to a jury and result in excluding certain embodiments." Instead, the Court adopted Unwired's proposed construction of "information regarding location." The Court stated: "Information regarding location' is a straightforward phrase that a jury would understand. A location input offers information about the location of the wireless station. If the input does not provide information about a wireless station's location then it is not a location input."

16 Here, the parties dispute whether BSSID and cell ID provide information regarding location. The parties agree about what BSSIDs and cell IDs are - the former are identification 17 18 numbers for Wi-Fi routers, and the latter are identification numbers for cell towers. Apple 19 contends they are not, on their own, information regarding location, because these identification 20numbers must be paired with Apple's own internal database to match up the router and cell ID with specific latitude and longitude information. But as Unwired correctly points out, even though 22 BSSIDs and cell IDs do not in themselves give the precise location of an iOS device, a reasonable juror could still conclude that they provide information regarding location. After all, they do provide information about routers and cell IDs, both of which typically have fixed locations, and the '092 patent itself discusses cell sector IDs as location inputs, so adopting Apple's argument could arguably exclude a disclosed embodiment.<sup>7</sup> See Broadcom Corp. v. Emulex Corp., 732 F.3d 26

<sup>&</sup>lt;sup>7</sup> Apple notes that cell ID, which Unwired contends is used by Apple's technology-finding system, and cell sector ID, which is disclosed as a location input in the '092 patent, are not the same thing. 28

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1325, 1333 (Fed. Cir. 2013).

Accordingly, because Apple has not demonstrated that it has addressed all of the alleged location inputs, and because a reasonable juror might conclude that BSSIDs and cell IDs provide information regarding location, Apple's motion for summary judgment of no direct infringement with respect to the '092 patent is denied.<sup>8</sup>

Apple has also moved for summary judgment on Unwired's claim of induced or contributory infringement. For Apple to be liable for indirect infringement, Unwired must show that Apple had knowledge of the patent's existence as well as knowledge that Apple's induced or contributory acts caused infringement. *See Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2067 (2011). Unwired can satisfy this knowledge requirement by showing either Apple's actual knowledge of infringement or Apple's willful blindness toward infringement, which occurs when a defendant "takes deliberate actions to avoid confirming a high probability of wrongdoing." *Id.* at 2070-71.

Here, Apple's noninfringement argument – namely, that its devices only use one location
input rather than a plurality of inputs – is strong enough that no reasonable juror could conclude
that Apple acted with actual knowledge that it was inducing or contributing to infringement. Nor
could a reasonable juror conclude that Apple was willfully blind as to infringement, because there
was no high probability of wrongdoing given the strength of Apple's noninfringement argument.
Therefore, even though the question of literal infringement of the '092 patent should go to a jury,
the question of indirect infringement should not, and Apple's motion is granted with respect to

<sup>8</sup> The question whether BSSIDs are cell IDs are "location inputs," as that term is used in the '092 patent, is arguably one of further claim construction. However, the Court has already provided a claim construction, and there is no way for the Court to further construe the term except in light of the accused device, which it should not do. *See Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1324 (Fed. Cir. 2009). Therefore, the jury, armed with the Court's claim construction, must decide whether the claim limitations are met by the accused device.

And it argues that they are qualitatively different – a cell ID is an ID for a piece of equipment (a cell tower), whereas a cell sector ID identifies a geographical area. But Unwired has presented evidence that a cell ID also identifies a geographical area, just in a less accurate way than a cell sector ID because a cell ID does not divide the relevant area into four sectors. Because the court must consider the evidence in the light most favorable to Unwired, the Court will credit Unwired's description of a cell ID.

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contributory and indirect infringement.

# B. "Proposal for LFS" as anticipatory prior art

Unwired has moved for summary judgment on Apple's invalidity argument that "Proposal for location finding system" ("Proposal for LFS"), a document authored by Bill Pierce of Motorola in connection with the Motorola agreement discussed below, is a printed publication that constitutes anticipatory prior art. "Whether an anticipatory document qualifies as a 'printed publication' under § 102 is a legal conclusion based on underlying factual determinations." Cooper Cameron Corp. v. Kvaerner Oilfield Prods., 291 F.3d 1317, 1321 (Fed. Cir. 2002). To be a prior publication, a document must be publicly accessible. See Norian Corp. v. Stryker Corp., 363 F.3d 1321, 1330 (Fed. Cir. 2004). Here, no reasonable jury could find, by clear and convincing evidence, that "proposal for LFS" was publicly accessible. The only identified source of the document came from the files of a former Unwired employee, James Fitch, who did not recognize the document and testified that he did not know whether it had been publicly disseminated. Further, Apple has not identified any individual who is aware that the document was disseminated, nor did Apple even take the deposition of Bill Pierce, the document's author. In fact, Apple's sole evidence is that the proposal states, on its face, that it was for "distribution" to two working groups, and that the practice in these working groups was to circulate drafts of proposals. But this conclusory evidence is insufficient for Apple to show, by clear and convincing evidence, that the proposal was *actually* publically disseminated. Accordingly, summary judgment is granted for Unwired Planet.

C. On-Sale Bar

Both parties have moved for summary judgment on Apple's on-sale bar defense. Under 35 U.S.C. § 102(b), a patent is invalid if "the invention . . . was on sale in this country, more than a year prior to the date of application for patent in the United States." The '092 patent application date is November 3, 1998, so the "critical date" for the on-sale bar is November 3, 1997.

United States District Court Northern District of California

Northern District of California United States District Court

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Apple alleges that Unwired made nine different offers for sale prior to this date.<sup>9</sup> In their summary judgment briefs, the parties primarily focus on one such alleged offer: a license and development agreement Unwired entered into with Motorola on March 29, 1996, in which Motorola sought to develop an LFS product that it could then market and sell to its customers.

#### i. Motorola agreement

In the agreement, titled "License and Development Agreement," Motorola agreed to pay Unwired to develop "WLS Software" that would be compatible with Motorola's hardware and that could lead to an integrated LFS product. Under the agreement, Unwired also gave Motorola a license to use the "WLS Software" that Unwired would develop. And if Motorola sold the integrated product to its customers, Motorola would pay a per-unit fee to Unwired. Apple contends the "WLS Software" covered by the agreement is the invention embodied by the '092 patent. And Apple contends that because Unwired licensed this software to Motorola, Unwired made an offer to sell (indeed, sold) the invention embodied by the '092 patent before the critical date.

The on-sale bar applies when, prior to the critical date, (1) the invention is the subject of a 16 commercial offer for sale, and (2) the invention is ready for patenting. *Pfaff v. Wells Elecs., Inc.,* 525 U.S. 55, 67 (1998). Here, Unwired does not dispute the "ready for patenting" prong, because documents preceding the critical date include drawings and descriptions that are almost identical to those included in the '092 patent. See id. at 67-68 (ready for patenting may be shown "by poof that prior to the critical date the inventor had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention."). Therefore, the only dispute is whether Unwired made a commercial offer for sale of the invention embodied by the '092 patent. This dispute consists of two parts. First, was the Motorola agreement, which included a license to Motorola for the "WLS Software," a commercial sale of that software? Second, if so, does "WLS Software," as that term is defined in the Motorola agreement, include the invention embodied by the '092 patent? 26

<sup>&</sup>lt;sup>9</sup> Much like the parties, the Court uses "Unwired" or "Unwired Planet" to refer not only to the 28 current company but also to its predecessor entities, including Signal Soft.

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On the first question, the Federal Circuit has fairly consistently held that a license to a patent right is not in itself a commercial sale that triggers the on-sale bar. See, e.g., Elan Corp. v. Andrx Pharms., 366 F.3d 1336, 1341 (Fed. Cir. 2004); In Re Kollar, 286 F.3d 1326, 1330 (Fed. Cir. 2002). But Unwired did not simply sell Motorola the rights to use a patent; rather, Unwired licensed the WLS Software to Motorola, and, as the Federal Circuit has acknowledged, a software license in which "[t]he product is . . . just as immediately transferred to the 'buyer' as if it were sold" can constitute a commercial offer. In re Kollar, 366 F.3d at 1330 n.3 (quoting Group One, Ltd. v. Hallmark Cards, Inc., 254 F.3d 1041, 1053 (Lourie, J., concurring)).<sup>10</sup> So the fact that this agreement was couched as a "license agreement" does not preclude application of the on-sale bar. The complicated part, however, is that the WLS Software was not immediately transferred to Motorola. In fact, it was never transferred, because Unwired never actually developed it, so the only product licensed to Motorola was a hypothetical one which never became a reality.

Given this, whether the license of the WLS Software constitutes a commercial sale of that software is a somewhat new question. The parties have not cited a case (and the Court is not aware of a case) directly on point.<sup>11</sup> But it is well established that an invention need not be reduced to practice for the on-sale bar to apply. *Pfaff*, 525 U.S. at 66. Rather, as long as the invention is conceived, there can be an offer for sale of it, so it seems immaterial that Unwired never actually developed the WLS Software. See August Technology Corp. v. Camtek, Ltd., 655 F.3d 1278, 1289 (Fed. Cir. 2011).

20Further, it is hard to imagine how this agreement was not a commercial sale. It is 21 undisputed that at the time of the agreement Unwired had been working on Location Finding 22 System technology and was developing a suite of software products incorporating this technology. 23 In the Motorola agreement, Unwired agreed to use its software technology to develop a software

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<sup>&</sup>lt;sup>10</sup> The agreement does, however, in Section 4(f), give Motorola "sole ownership of all right and title to any patents rights for any inventions or discoveries . . . developed under this Agreement." 26

<sup>&</sup>lt;sup>11</sup> Apple argues that *Robotic Vision v. Sys., Inc. v. View Eng'g, Inc.*, 249 F.3d 1307 (Fed. Cir. 27 2001) is highly instructive. But as the Federal Circuit later clarified, *Robotic Vision* dealt only with the "ready for patenting" prong. Sparton Corp. v. United States, 399 F.3d 1321, 1324-26. 28 Here, by contrast, the dispute centers on the on-sale prong.

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that was compatible with Motorola's hardware, and Unwired further agreed to give Motorola the right to use that software in exchange for per-unit royalty payments. This is clearly an effort by Unwired to make money off of its software technology. The fact that the Motorola agreement failed to yield an end product to sell to customers is irrelevant, because what matters is whether Unwired commercialized its software technology, which is exactly what it did with the Motorola agreement. What's more, around the same time as the Motorola agreement, Unwired entered into a number of other agreements with different companies, all of which related to Unwired's LFS software, further evidencing that Unwired was commercializing its software technology.

On the question whether the agreement reflects a sale, there is no factual dispute. The agreement speaks for itself. Therefore, the Court concludes there was a sale. The remaining question is whether WLS Software, as the term is used in the agreement, is the invention embodied by the '092 patent. On this point, the parties, both in their summary judgment briefs as well as in supplemental briefs ordered by the Court, have presented conflicting evidence. Accordingly, a jury must decide this question, and therefore the parties' cross-motions for summary judgment are denied.

#### ii. Other Eight Alleged Offers for Sale

Unwired moved for summary judgment with respect to all nine alleged offers for sale. In its cross-motion for summary judgment, Apple only addressed three of those alleged offers: the Motorola agreement discussed above, the May 9, 1997 SCC Agreement, and the September 26, 1997 Agreement. Therefore, because Apple has not created a material dispute with respect to the other six alleged offers, summary judgment on those alleged offers is granted for Unwired. However, for the other two offers – the May 9, 1997 SCC Agreement and the September 26, 1997 AT&T Agreement – Apple provided some evidence that they constituted an offer of the invention

embodied by the '092 patent, and Unwired did not address this evidence in its opposition, so both
parties' motions for summary judgment are denied with respect to these two agreements.

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#### D. Marking

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Both parties have moved for summary judgment on Apple's marking defense on all four patents-in-suit. But because the Court has granted summary judgment of noninfringement on the '831, '446, and '260 patents, these patents are no longer in the case, pursuant to Apple's communication with the Court. Therefore, the parties' motions are moot with respect to those patents. The only remaining marking defense is against the '092 patent, but Unwired has only asserted method claims with respect to the '092 patent, and "[t]he law is clear that the [marking requirements] do not apply where the patent is directed to a process or a method." *Crown Packaging Tech., Inc., v. Rexam Beverage Can Co.*, 559 F.3d 1308, 1316 (Fed. Cir. 2009). Accordingly, summary judgment is granted for Unwired with respect to Apple's marking defense on the '092 patent.

#### E. Laches

14 Unwired has moved for summary judgment on Apple's laches defense with respect to all 15 four patents, but again only the '092 patent remains in the case. To succeed in its laches defense, 16 Apple must prove by a preponderance of the evidence that (1) Unwired delayed filing suit for an unreasonable and inexcusable length of time from the time that Unwired knew of its claim against 17 18 Apple, and (2) this delay prejudiced Apple. A.C. Aukerman Co. v. R.L. Chaides Const. Co., 960 19 F.2d 1020, 1032 (Fed. Cir. 1992). With respect to the first prong, while a determination of what 20constitutes an unreasonable or inexcusable delay is a question of fact, courts have typically found 21 a period of delay could potentially be considered 'unreasonable' only if it substantially exceeded 22 four years, and "a delay of three or four years has been deemed 'unreasonable only when that delay 23 was accompanied by extraneous improper tactics or misleading conduct by the plaintiff." 24 Mformation Techs., Inc v. Research in Motion Ltd., 830 F. Supp. 2d 815, 824 (N.D. Cal. 2011) 25 (quoting IXYS Corp. v. Advanced Power Tech. Inc., 321 F. Supp. 2d 1156, 1163 (N.D. Cal. 2004). For the '092 patent, the relevant time period of delay is 4 years and 9 months. Even though 26 27 Unwired Planet waited more than four years to sue Apple, there is no evidence that Unwired 28 engaged in improper tactics or misleading conduct. But even if this delay could be considered

unreasonable or inexcusable, Apple cannot as a matter of law meet the second prong of the laches analysis, because it has produced no evidence of material prejudice that it has suffered as a result of Unwired's delay. In its opposition brief, Apple argues that because Unwired sold its business during the relevant time period, certain witnesses were not able to testify about products relevant to this lawsuit. But the 30(b)(6) witness Apple claims couldn't remember information about an Unwired product wasn't even designated as a technical witness, and, in any event, such assertions, unsupported by specific facts, are insufficient to demonstrate evidentiary prejudice. See Meyers v. Asics Corp., 974 F.2d 1304, 1308 (Fed. Cir. 1992).<sup>12</sup> Accordingly, because Apple's evidence is insufficient to convince a reasonable juror that Apple suffered material prejudice as a result of Unwired's delay, summary judgment is granted for Unwired Planet with respect to Apple's laches defense on the '092 patent.

**IT IS SO ORDERED** 

Dated: May 22, 2015

VINCE CHHABRIA United States District Judge

25	<sup>12</sup> Unwired contends that the laches clock should not run during the time period that it was involved in both licensing discussions and different litigation with Apple, meaning that the
26	relevant period of delay on the '092 patent should be roughly 3 years rather than 4 years and 9 months. But Unwired has not presented evidence that it discussed licensing of the '092 patent in
27	particular, nor was the '092 patent involved in other litigation with Apple, so it is not clear that this time period should be excluded from the laches analysis. But in any event, whether the

appropriate time period is 3 years or 4 years and 9 months is irrelevant since Apple has not suffered any material prejudice.