

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,

Petitioner,

v.

DH INTERNATIONAL LTD.,

Patent Owner.

Case No. IPR2024-01322

U.S. Patent No. 9,022,294

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

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I. INTRODUCTION

As in its Preliminary Response (Paper 7, “POPR”), Patent Owner urges the Board to adopt its narrow construction of “activation cue” and “data conveyance switching element,” and maintains that neither *Mooney* nor *Mooney and Lee* render obvious the challenged claims under its proffered construction. Patent Owner’s Response (Paper 17, “POR”), 5-7, 11. The Board should reject Patent Owner’s constructions and arguments, which are unsupported by evidence and are duplicative of those the Board already rejected in its Institution Decision (Paper 10, “DI”).¹

First, the Board should maintain its construction of “activation cue” (to the extent construction is needed) because the ’294 Patent does not support limiting the claimed “activation cue” to something that is intended as a predetermined indicator, as Patent Owner argued. DI, 13-14; Preliminary Reply (Paper 8, “Prelim.

¹ The POR is nearly identical to the POPR and fails to address the Board’s instructions for parties to address competing positions. Any further arguments should be considered “forfeited or waived.” DI, 37; *Integrated DNA Techs., Inc. v. Pillar Bioscis., Inc.*, No. 2022-2172, 2024 WL 5182912, at *5 (Fed. Cir. Dec. 20, 2024); *In re NuVasive, Inc.*, 842 F.3d 1376, 1380-81 (Fed. Cir. 2016); 37 C.F.R. § 42.23(b).

Reply), 1-2. Second, the Board should maintain its construction of “data conveyance switching element” because Patent Owner’s construction “conflicts with the express disclosure of the ’294 Patent.” DI, 15; Prelim. Reply, 2-4. Finally, the Board should reject Patent Owner’s arguments regarding claim elements [1.a], [1.e], [1.f], and [1.h] (the “disputed limitations”) because they are predicated on Patent Owner’s improper claim constructions, fail to address the express mappings in the Petition (Paper 1, “Pet.”), contradict the express disclosure of *Mooney*, and/or attack the prior art references individually instead of addressing the asserted combination. Patent Owner’s arguments related to claims 2-20 fail for the same reasons.

Accordingly, the Board should find all challenged claims unpatentable.

II. CLAIM CONSTRUCTION

A. The Board Should Maintain the Claim Constructions From Institution

The Board determined that only “activation cue” and “data conveyance switching element” warranted construction. DI, 12-16; Prelim. Reply, 1-4.

Petitioner agrees with the Board’s preliminary constructions, and no other terms require construction to determine patentability. DI, 12-16; Prelim. Reply, 1-4.

Nothing in the POR demands an alternate outcome. Patent Owner’s construction of “data exchange device”/“external data exchange device” and “close proximity” should also be rejected. POR, 7-9.

1. Activation Cue

Consistent with the DI, activation cue should be construed as “data communication of a specific type that will be recognized by the cellular phone as an activation cue received from a source external to the cellular phone.” DI, 12-14; Prelim. Reply, 1-2.

Patent Owner maintains that “‘activation cue’ means a predetermined indicator ... that is ‘recognized by the electronic device as an activation cue’” and “‘must be intended as a predetermined indicator” POR, 5-6 (citation omitted). But Patent Owner’s construction improperly narrows activation cue and is unsupported by the intrinsic record. Prelim. Reply, 1-2; DI, 13-14. Nothing in the ’294 Patent’s description requires the activation cue to be “intended as” a predetermined indicator, or precludes messages or signals recognized as a message or signal for other action (including the Bluetooth signals of the prior art) from being an activation cue. *See* Ex. 1001, 9:24-27; *Kamstrup A/S v. Axioma Metering UAB*, 43 F.4th 1374, 1383-84 (Fed. Cir. 2022).

Patent Owner further argues that if the activation cue is not “predetermined,” then “the claim element has been improperly read out of the claims” and “hindsight is used to call any message or signal an activation cue, even it [sic] that message or signal is never intended to operate as an activation cue.” POR, 6. Patent Owner’s concern misses the mark. The claims do not recite a “predetermined” activation

cue, so rejecting Patent Owner's construction cannot read out an unrecited claim element. The specification similarly does not require that the activation cue be predetermined. *Id.* It explains that the activation cue "is in the form of a data communication of a specific type which *will be recognized* by electronic device 10 as an activation cue." Ex. 1001, 9:24-27 (emphasis added). Thus, the onus is on the *electronic device* to recognize the activation cue, not for the data communication to be predetermined or intended as such. *Id.* It is not hindsight for the claims to be read in light of the specification, nor is it the Board's responsibility to redraft the claims.

Accordingly, the Board's preliminary construction is correct.

2. Data Conveyance Switching Element

Patent Owner repeats that "'data conveyance switching element' should be given its plain meaning, which is the switching of the data." POR, 7; POPR, 10-11. Patent Owner's construction "conflicts with the express disclosure of the '294 Patent" and should be rejected. Pet., 6; Prelim. Reply, 2-4; Ex. 1001, 2:4-9, 4:18-23, 5:48-53, 9:28-31, 9:40-41. The data conveyance switching element is not merely "switching of the data," as Patent Owner contends. Pet., 6; Prelim. Reply, 2-4; DI, 14-16. The switching element is broadly defined in the specification as "any type of device," that switches between inactive and activated states based on the receipt of an activation cue. Ex. 1001, 9:28-41; Pet., 6; Prelim. Reply, 3.

Critically, Patent Owner does not dispute the Board’s finding that “the switching element allows the device to switch between alternate operations *for conveying data* from the cellular phone to an external data exchange device.” DI, 15 (emphases added).

B. Patent Owner’s Remaining Constructions Should Also Be Rejected

1. Data Exchange Device/External Data Exchange Device

Petitioner maintains that if these terms are subject to construction under 35 U.S.C. § 112, sixth paragraph (pre-AIA), that the corresponding structure is a *data transceiver coupled to a circuit*, and that the corresponding function is *exchanging data*. Pet., 7-8.

Patent Owner appears to suggest that only a plain and ordinary meaning should apply. POR, 7-8. Patent Owner also maintains that “[a]n external data exchange device is not a transceiver but a device with a transceiver.” *Id.* Neither of Patent Owner’s constructions dispute Petitioner’s characterization of these terms. Moreover, Patent Owner does not contest Petitioner’s mappings of *Mooney*’s “cordless telephone base unit” or “cellular network infrastructure” to the claimed data exchange devices. POR, 16-37. Thus, the Board need not construe data exchange device and external data exchange device to resolve the issues before it. *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011).

2. Close Proximity

Patent Owner repeats multiple constructions of “close proximity,” including a “several-meter range,” “10 meters or less,” and “at least less than 30 meters.”

POR, 8-9; POPR, 12.

Petitioner maintains that Patent Owner’s constructions are unduly narrow because none of its cited evidence mentions, let alone limits, “close proximity.” Prelim Reply, 4-5. To the contrary, the specification suggests that “close proximity” for a given system depends on the selected data exchange device and its configuration. Ex. 1001, 9:8-11. Patent Owner does not refute this. The plain language of the claims explains that “close proximity” is “within a range to receive the activation cue to initiate the wireless data exchange.” *Id.*, claims 8, 16. No further construction is warranted in light of this plain language.

Patent Owner’s construction is merely an attempt to exclude the prior art. According to Patent Owner, *Mooney* does not disclose close proximity because its “piconet/Bluetooth receiver has a range of up to 100 feet [30 meters],” whereas “[c]lose proximity is described in the ’294 Patent as ‘a proximity transceiver that allows data transmission within a limited range, such as within several meters[,] for example.’” POR, 41. But this nonlimiting example of the ’294 Patent cannot be used to narrow the scope of the claims. Prelim. Reply, 4-5; *see Sisvel Int’l S.A. v. Sierra Wireless, Inc.*, 81 F.4th 1231, 1236-37 (Fed. Cir. 2023) (finding claim

language was not so narrow as the specification's broad examples contained "*such as*" language (citation omitted)); *Cont'l Cirs. LLC v. Intel Corp.*, 915 F.3d 788, 797 (Fed. Cir. 2019) (holding it is improper to limit claims based on one embodiment that does not disavow claim scope). This is especially true because "close proximity" depends on the configuration of the data exchange device (which can be "any other suitable data exchange device") and because the plain language of the claims explains that "close proximity" is "within a range to receive the activation cue to initiate the wireless data exchange." Ex. 1001, 9:8-11, claims 8, 16; *see Sisvel*, 81 F.4th at 1236; *see also Kamstrup*, 43 F.4th at 1384 (rejecting arguments that limited a "claim to a non-limiting embodiment").

III. *MOONEY* DISCLOSES OR RENDERS OBVIOUS THE DISPUTED LIMITATIONS

Patent Owner argues that claims 1-20 are not obvious based on *Mooney* because "*Mooney* fails to teach or disclose at least one claim element of claims 1-20." POR, 11. This is not the relevant inquiry under 35 U.S.C. § 103. Instead, the obviousness analysis asks whether the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious to a POSITA at the time the invention was made. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). Patent Owner avoids this inquiry—electing instead to argue nonobviousness by identifying so-called fundamental differences between *Mooney* and the '294 Patent that are neither

recited nor required by the claims. POR, 11-15 (arguing that *Mooney* does not disclose stored data and that *Mooney*'s "switch over" is simply activating an already established call path).

Patent Owner suggests that a "POSITA would have no motivation to look to" *Mooney* because it is not directly related to financial transactions. POR, 15-16. Tellingly, Patent Owner does not argue that *Mooney* is not analogous art—the relevant inquiry here. *Id.* And Patent Owner is wrong. A POSITA would have understood *Mooney* to be relevant to the claims of the '294 Patent for two reasons. Lipoff Reply (Ex. 1014), ¶¶32-35. First, the challenged claims are not limited to financial transactions. Pet., 2; Lipoff Reply, ¶¶27, 33. Second, *Mooney* is relevant to the claimed invention because it is in the same field of endeavor as the '294 Patent—portable electronic devices capable of alternate data conveyance operations—and addresses a similar problem—automating the switch of data conveyance. *Compare Mooney*, 1:50-2:4, with Ex. 1001, 1:15-18, 12:6-18; Pet., 2-5, 8-13, 28-34; Lipoff Reply, ¶34.

Patent Owner's arguments for disputed limitations should be rejected because they are untethered from the claim language itself, predicated on Patent Owner's erroneous constructions, fail to address the express mappings in the Petition, contradict the express disclosure of *Mooney*, and/or attack the prior art references individually instead of in combination.

A. Neither Disputed Element [1.a] nor Claim 1 as a Whole Requires Transmitting Stored Data

Patent Owner reargues that *Mooney* does not disclose [1.a] because “[t]he ’294 [P]atent teaches data that is *stored prior* to transmission,” and Petitioner “fails to establish that the *data will be transmitted through a transceiver as required in the claims*, (element 1.h).” POR, 17-18 (emphases added); POR, 11-15; POPR, 19-22. Relying on its interpretation of “data,” Patent Owner further argues that “the ‘data’ term described in the Petition is not stored data[;] rather[,] it is real-time data, and this type of data fails to meet the data element used in later elements of the claims.” POR, 18. But nothing in claim 1 requires Patent Owner’s narrow reading of “data,” and *Mooney* plainly discloses the claimed electronic circuit.

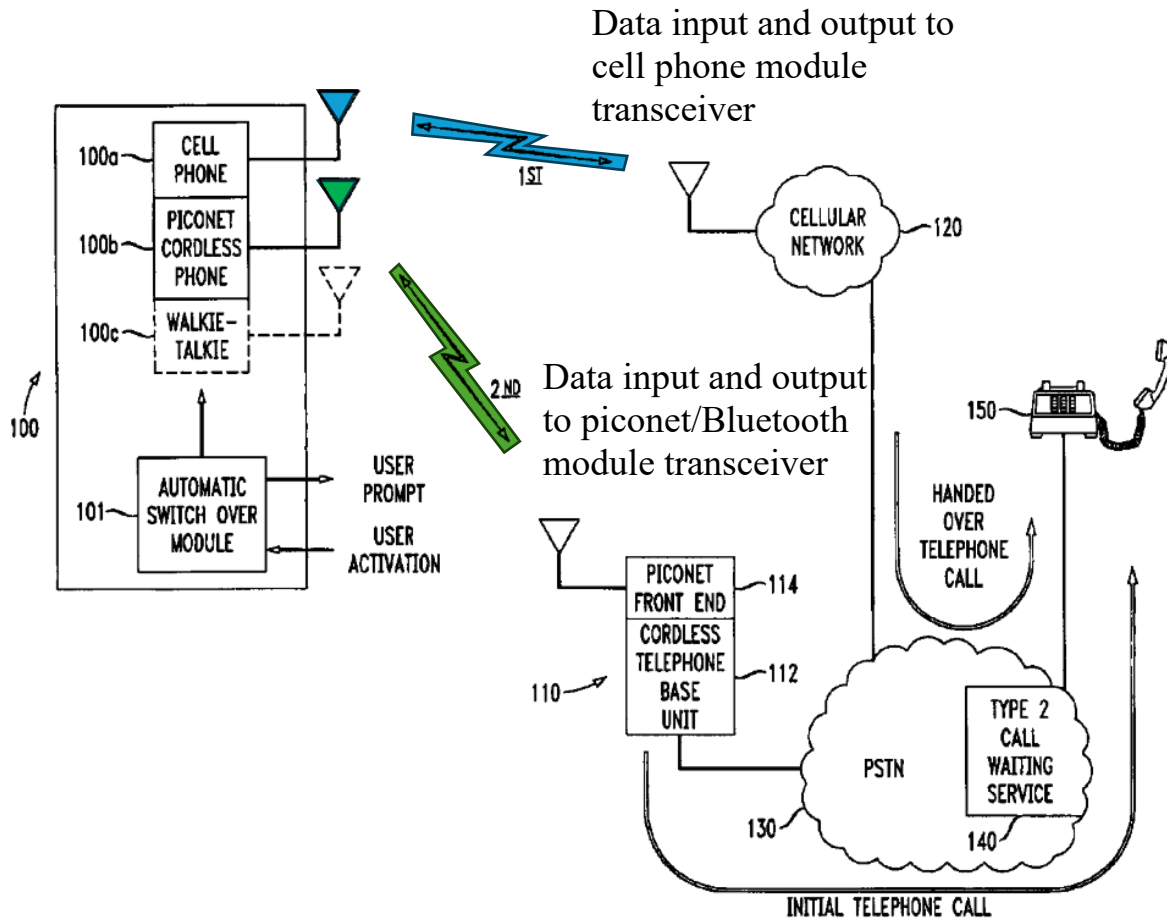
First, Patent Owner’s attempt to limit “data” to stored data that “will be transmitted through a transceiver” or “has to be able to be transferred” (POR, 17-18) should be rejected because element [1.a] merely recites “an electronic circuit capable of *storing data* therein, capable of *processing data*, and capable of *data input and output*.” Ex. 1001, claim 1, [1.a] (emphases added). Not only are these recitations of “data” expressed as distinct capabilities but nothing in [1.a] links them together or requires that the same data be stored, processed, and transmitted. DI, 22 (observing that Patent Owner “appears to be reading a limitation from a preferred embodiment into claim language that is not so limited”). Claim element [1.h] does not warrant an alternate, narrower interpretation because that element

only requires “sending data from said electronic circuit,” not sending stored data.

Ex. 1001, claim 1, [1.h]. As the Board correctly found at institution: “Claim 1 does not recite sending ‘stored’ data from the electronic circuit to a data exchange device or otherwise rely on antecedent basis to limit the data being sent from the electronic circuit.” DI, 22-23.

Second, *Mooney* discloses the claimed electronic circuit capabilities.

Mooney, 1:13-22, 1:54-66, 3:52-63, 7:9-12; Pet., 16-18 (explaining that *Mooney*’s “multimode cell phone” includes various electrically coupled electronic components (an electronic circuit)).



Mooney, Fig. 1 (excerpted, annotated). Even if *Mooney*'s data only pertained to real-time voice or call data as Patent Owner alleges, "*Mooney*'s transmission of real-time voice or call data would also satisfy [1.h] and [1.i] as 'data' sent from the electronic circuit on the cellular phone to the far end phone" because nothing in the claims requires transmission of stored data. DI, 23.

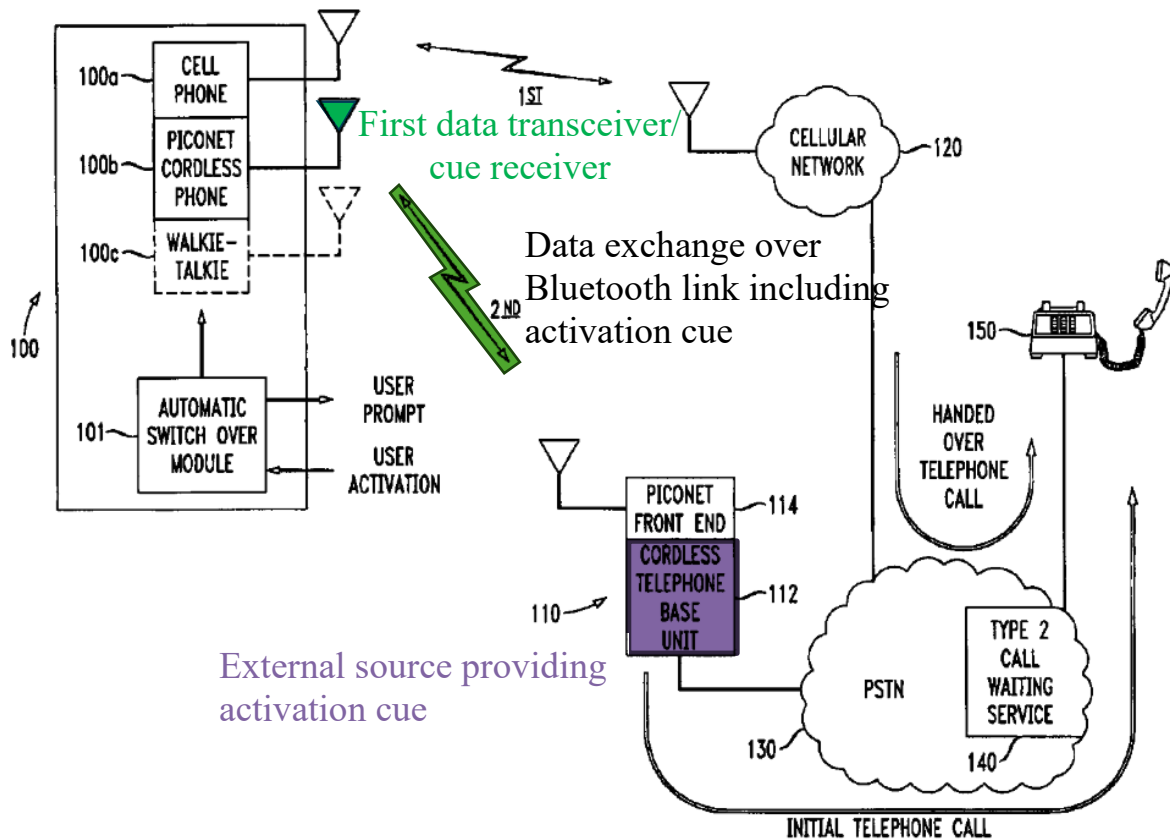
B. *Mooney*'s Quality Bluetooth Signal Is the Activation Cue of [1.e]

Patent Owner repeats and repackages various arguments based on the Cordless Telephony Profile (Ex. 2003) to dispute that *Mooney* discloses an activation cue. POR, 19-30. *Mooney*, however, establishes that its multimodal

phone is configured for “automatic detection of the quality of the RF link (e.g., the BLUETOOTH™ piconet link),” which determines what communication link (and operational mode) to use. *Mooney*, 6:45-51, 6:18-25; Pet., 26-28. Patent Owner’s counterarguments should be rejected because 1) *Mooney*’s multimodal phone is not restricted to the functionalities outlined in Ex. 2003; 2) it is irrelevant whether *Mooney*’s multimodal phone pings the base unit first; and 3) a Bluetooth link is not the same as a phone call made using Bluetooth. POR, 19-29. Patent Owner’s ultimate conclusions fail for similar reasons. *Id.*

1. *Mooney*’s Quality Bluetooth Signal Is Recognized by the Cellular Phone as an Activation Cue

As the Petition explains, *Mooney*’s multimodal phone includes a first transceiver (a cue receiver) that receives “quality” Bluetooth signals (an activation cue) from a “piconet front end” and “base unit” (source external to the phone). Pet., 26-28.



Mooney, Fig. 1 (annotated, excerpted).

When a caller on the multimode cell phone is “within range of the cordless telephone base station that is matched to the cordless telephone mode of the 3-in-1 cell phone” and/or the “cordless telephone link (e.g., a piconet BLUETOOTH™ link of good quality) has been established with the cordless base for a given length of time (e.g., for at least two minutes),” the piconet/Bluetooth cordless module is informed of the signal quality (via its first transceiver/cue receiver) and a call mis established in cordless mode via the BLUETOOTH™ link. *Mooney*, 2:53-3:7, 4:34-37, 6:18-25, 1:31-34, 3:49-51, 4:12-15, 4:54-56, Figs. 1, 2; Lipoff, ¶99.

Mooney discloses receiving and recognizing an activation cue at the multimodal phone. Lipoff Reply, ¶¶44-46.

2. Patent Owner's Counterarguments Should Be Rejected

Patent Owner relies on the Cordless Telephony Profile (Ex. 2003)² to argue that *Mooney*'s quality Bluetooth link is not an activation cue. POR, 21-22, 25-27.

Patent Owner is wrong.

First, the passage relied on by Patent Owner does not undermine the express disclosure of *Mooney* because *Mooney*'s multimodal phone is not restricted to the functionalities outlined in the profile. Instead, *Mooney*'s devices are *capable* of implementing the functionalities described in the profile and seek to *improve* upon conventional multimodal phones. *Mooney*, 1:46-48 ("There is a *need* in a 3-in-1 cell phone which provides smooth switchover and interaction between separate modes of operation." (emphasis added)), 3:22-25, 3:34-47.

² Patent Owner alleges that Petitioner's expert reached "flawed" conclusions because he "did not consider the actual[] teachings of the Bluetooth specification." POR, 23-24. Patent Owner's arguments here are duplicative of others made in the POR. POR, 19-28. Therefore, they should be rejected for the same reasons discussed throughout Section III.

Second, it is irrelevant whether *Mooney*'s multimodal phone "pings" the base unit first "to notify the cordless telephone base unit it is in range" (POR, 21-22, 25-26) as this is not what the Petition argued (Pet., 26-28). The "pings" described in the Cordless Telephony Profile are not messages that transmit information about the quality of the Bluetooth signal when the multimodal phone is within range. Lipoff Reply, ¶¶48-51. Even if the multimodal phone sends a first message, it is the response from the base unit that would communicate information about the quality of the signal to the multimodal phone. Lipoff Reply, ¶¶48-52; POR, 22 (citing Ex. 2003, 111, and acknowledging response messages). And it is the *base unit*'s communication of a quality Bluetooth signal that Petitioner argued discloses the claimed "activation cue." Pet., 26-28. Moreover, as the '294 Patent discloses and the Board found at institution, the activation cue need only be "recognized by the electronic device as an activation cue." Ex. 1001, 9:22-27; POR, 19; DI, 14. This is precisely what *Mooney* discloses. *Mooney*, 6:17-25, 6:45-51 (attributing changes in Bluetooth link quality to user proximity to the base unit). Lipoff Reply, ¶¶51-52.

Third, Patent Owner's contention that *Mooney*'s Bluetooth link is a phone call and not the Bluetooth connection itself (POR, 22-23) contradicts its own evidence and *Mooney*'s express disclosure. Lipoff Reply, ¶¶53-54. It cannot be true that *Mooney*'s quality Bluetooth link "*is a call*" (POR, 22 (emphasis added))

because *Mooney* expressly discloses that calls are “*establish[ed]*” over either “a wireless cell phone network, *or* with a local cordless telephone, depending upon which mode the phone is in.” *Mooney*, 1:31-34 (emphases added); *Mooney*, 1:56-61, 4:54-56 (“[A] cordless telephone *call is established using a cordless telephone mode* of the multimode cell phone 100.” (emphasis added)). Thus, *Mooney*’s prescribed link or communication path is established in advance of the call, and the quality Bluetooth link is not the call itself. Lipoff Reply, ¶¶53-54. Furthermore, and although nonlimiting on *Mooney*’s express functionalities, the Cordless Telephony Profile also describes interactions between a TL and GW in which a “SETUP” acknowledgement is transmitted from the GW to the TL *before* call information is shared or a call proceeds. Ex. 2003, 134, Fig. 10.2; Lipoff Reply, ¶¶53-54.

10.2 OUTGOING EXTERNAL CALL WITH POST-DIALLING

The following sequence shows the successful case when post-dialling is used.

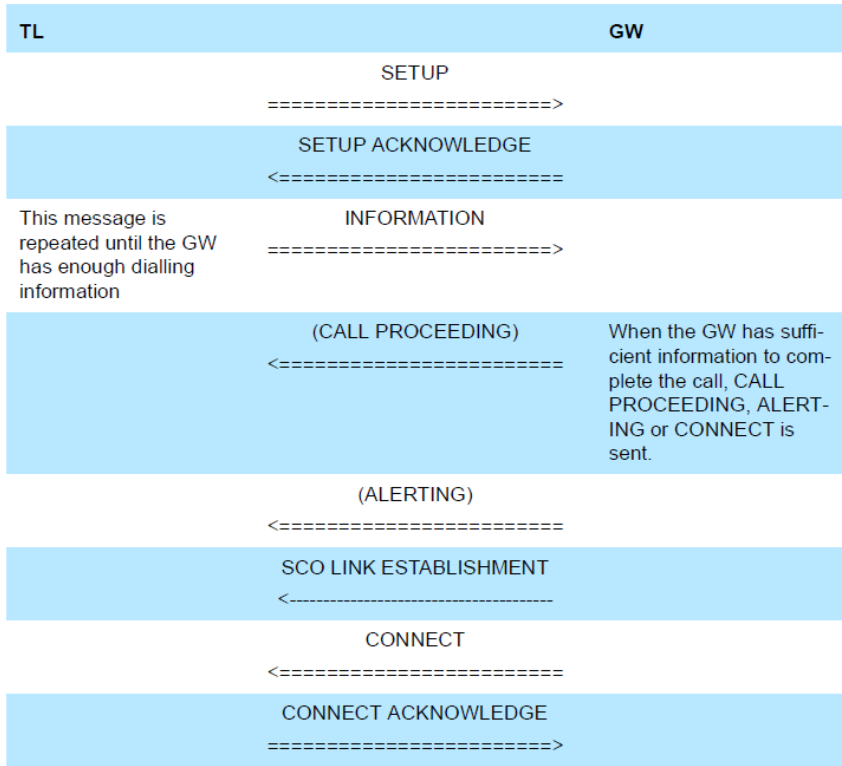


Figure 10.2: Outgoing external call with post-dialling

Ex. 2003, Fig. 10.2.

3. Patent Owner’s Ultimate Conclusions Fail

Patent Owner’s first conclusion—that “*Mooney* fails to teach ‘activation cue’ because ... call data is transmitted *before* Petitioner’s alleged activation cue is received” (POR, 28)—fails for these same reasons discussed above. Lipoff Reply, ¶¶41-55. That the nonlimiting Cordless Telephony Profile states that “[a] TL ... that is within range of a GW ... shall *normally be* in park mode when it is not engaged in calls,” as argued by Patent Owner, is not determinative of how

Mooney's multimodal device actually functions. POR, 26-27 (emphasis added)

(quoting Ex. 2003, 111); Lipoff Reply, ¶¶50, 55.

Patent Owner's second conclusion—that "[t]he two-minute timer cannot act as 'an activation cue' because it is not received by *Mooney*'s cellular phone but is actually set within the cellular phone" (POR, 27-28)—misses the mark. First, as the Petition described "a POSITA would have understood that a 'good quality' Bluetooth signal originating from the base unit (*e.g., one that is 'within range' and/or* 'has been established with the cordless base for a given length of time'), is an activation cue" Pet. 27 (citing *Mooney*, 1:31-34, 3:49-51, 4:6-15, 4:28-36, 6:14-25, 6:45-51; Lipoff, ¶100). In other words, a POSITA would have understood that *Mooney*'s "two minute" disclosure is merely an example of a series of received quality Bluetooth signals that would trigger a switch. Pet. 26-28; Lipoff, ¶¶98-100; Lipoff Reply, ¶56. Moreover, even if the length of time a quality signal has been established is measured in *Mooney*'s multimodal phone, a POSITA would have understood that this measurement is based on the receipt of quality signal or signals from the base unit. Lipoff Reply, ¶56. Thus, a POSITA would have understood *Mooney*'s multimodal phone "recognize[s]" the signal received at two-minutes (for example) as a sign to switch states. Ex. 1001, 9:24-27; Lipoff Reply, ¶56.

C. *Mooney* Discloses [1.f] Because Its “Automatic Switch Over Module” Switches Between Two Modes Based on the Quality of the Bluetooth Signal

Patent Owner does not dispute that *Mooney* discloses a data conveyance switching element operatively linked to said electronic circuit and only disputes whether *Mooney* switches states based on the receipt of an activation cue. POR, 30-35; POR, 13-15. According to Patent Owner, *Mooney* does not disclose the latter because “[t]ransferring from a cordless telephone to cellular telephone is not necessarily automatic,” and “change of state only occurs in *Mooney* after 1) successfully setting up a second path; and 2) successfully transferring over to the new path.” POR, 32-35. Patent Owner’s arguments should be rejected because they are directed to embodiments in which a multimodal phone switches communication paths *mid-call* based on a *user prompt*—they do not address the mappings advanced in the Petition, let alone Petitioner’s argument that the *automatic* switching module selects a communication *before* a call is established. Pet., 28-34.

As explained in the Petition, “*Mooney*’s automatic switch over module (data conveyance switching element) is assigned, by the processor, to a first state (piconet/Bluetooth connection for cordless telephone mode) upon coming in range of the base unit 110 *and receiving at the piconet module transceiver (cue receiver) a quality Bluetooth signal (activation cue) indicating that the phone is capable of*

establishing a call in piconet/Bluetooth cordless mode.” Pet., 32 (emphasis added) (citing *Mooney*, 5:8-11, 6:14-24; Lipoff, ¶106). The Petition further explains that a POSITA would have understood that *Mooney*’s automatic switch over module is also assigned, by the processor, to a second state (cellular network for cell phone mode) when no quality Bluetooth signal (no activation cue) is received by the first transceiver (cue receiver) of the piconet cordless module. Pet., 33 (citing *Mooney*, 4:17-30, 4:57-58, 6:45-51, 7:9-12; Lipoff, ¶109). This is because *Mooney* discloses (among other things) that its automatic switch over module switches to cell phone mode when the multimode cell phone 100 “senses” that it has extended beyond an “acceptable” Bluetooth range, and further explains that “the multimode cell phone 100 may switch from cordless mode to cell phone mode” when “the need (or desire) to change communication modes to a cellular mode is determined,” due to “automatic detection of the quality of the RF link (e.g., the BLUETOOTH™ piconet link) below a preset level.” Pet. 32-33 (quoting *Mooney*, 4:57-58, 6:45-51; Lipoff, ¶108).

Finally, the Petition explains:

[B]ecause the determination of whether the data is to be conveyed to a “cordless telephone [Bluetooth] base unit” (first external data exchange device) using a “Bluetooth link,” or a “cellular network” (second external data exchange device) over a “cell phone link,” has already been made when the user dials a far end telephone number

(upon triggering an invariable command, as explained in [1.b]), a POSITA would have also understood that *the automatic switch module is assigned to the piconet/Bluetooth mode (first state) or the cell phone mode (second state) before the call is “established” (data is exchanged)* Lipoff, ¶110.

Pet., 32-34 (second alteration in original) (emphasis added).

That *Mooney* also describes switching between Bluetooth cordless and cellular modes during a call (POR, 31-33) does not negate the fact that *Mooney*’s device also determines which path to *initiate* a call with or that the path may be switched *prior to establishing* the call using an entirely automated process. As explained in Section III.B, “*establishment of a telephone call with a wireless cell phone network, or with a local cordless telephone, depend[s] upon which mode the phone is in.*” *Mooney*, 1:31-34 (emphases added). Patent Owner’s hypothetical—that “[t]he change of state ... may never occur[] [i]f the setup of the call path is not successful due to the far-end phone refusing to accept” (POR, 33)—also misses the mark because it presumes that the state is selected after the call is established, which is not the case as explained in Section III.B.

D. *Mooney*’s User Dials a Phone Number to Establish a Call (Trigger an Invariable Activation Command) as Recited in [1.h]

Patent Owner repeats that “dialing a telephone number is not an invariable action command.” POR, 37; POPR, 33-34. Petitioner mapped the act of dialing as the trigger and the ensuing call initiation as the invariable activation command.

What Petitioner did not argue—and what Patent Owner incorrectly suggests—is that simply connecting to the base unit or dialing numbers somehow triggers the state change or the activation cue itself. POR, 36.

As explained for *undisputed* claim element [1.b], and reiterated in [1.h], calls are “initiated” or “established” (an invariable activation command) by a user operating *Mooney*’s multimode cell phone when the user dials a telephone number on a keypad thereof (a user-triggered control device is operated by a user to issue the command). Pet., 19-20, 38-39. Thus, contrary to Patent Owner’s characterization of the Petition, dialing the phone number corresponds to the claimed “trigger[],” and the call that ensues corresponds to the claimed “invariable action command.” *Id.*

Although the ’294 Patent does not define “invariable action command,” it does explain that “[t]he same invariable activation command will ... issue[] upon control device 12 being triggered, and it is the state of switching element 44b, resulting from the receipt or non-receipt of an activation cue by portable electronic device 10” Ex. 1001, 10:46-51. This is precisely what *Mooney* discloses—Patent Owner does not and cannot dispute that *Mooney*’s device will establish a phone call (the same invariable command will issue) once a number is dialed (upon the device being triggered). Thus, *Mooney* discloses the claimed trigger and ensuing invariable action command.

Patent Owner's other arguments with respect to [1.h]—that *Mooney* does not disclose the claimed activation cue (POR, 35-37)—fail for each of the reasons articulated with respect to claim element [1.e]. Pet., 26-28; Section III.B. Accordingly, *Mooney* discloses or renders obvious [1.h], and the Board should reject Patent Owner's arguments.

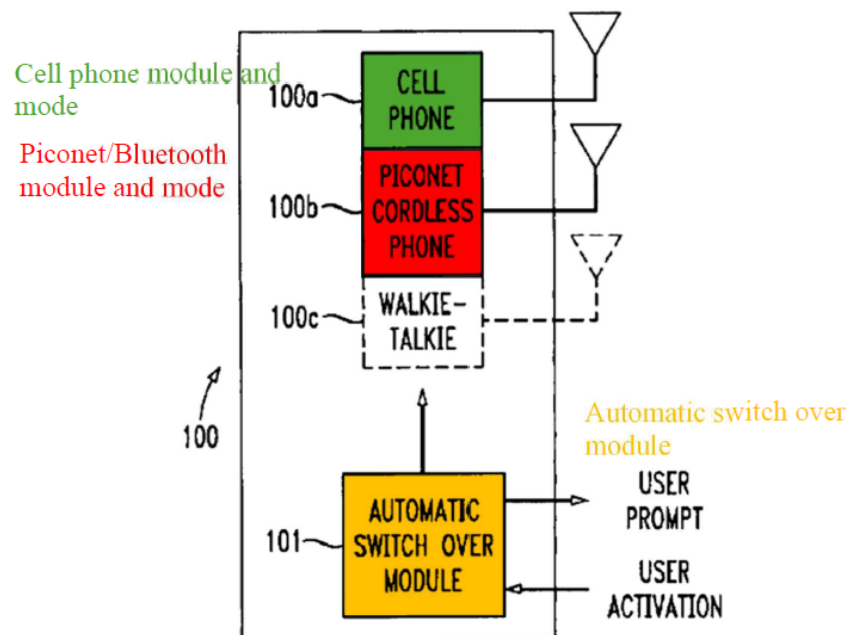
IV. *MOONEY* DISCLOSES OR RENDERS OBVIOUS EACH OF REMAINING CLAIMS 2-20

Patent Owner generally argues that *Mooney* does not disclose or render obvious claims 2-20 because *Mooney* does not disclose the disputed limitations. POR, 38-53. Patent Owner is wrong for the reasons advanced in the Petition and because *Mooney* discloses the disputed limitations as articulated in Section III.

Patent Owner's additional counterarguments regarding claims 5-8, 13, 16, and 19 should also be rejected.

Regarding claims 5-7, Patent Owner contends that these claims are not unpatentable over *Mooney* because "Petitioner fails to identify where the switching element is, as defined in claim 1." POR, 39-40. But the claims do not require or prescribe a precise location—rather, they only require that the data conveyance switching element be "operatively linked to said electronic circuit." Ex. 1001, claim 1, [1.f]. Thus, Patent Owner's argument should be rejected because it requires unclaimed features.

Even so, as explained in the Petition, *Mooney*'s "multimode cell phone includes an 'automatic switch over module' (data conveyance switching element) operatively connected to the processor, piconet/Bluetooth cordless module, and cell phone module (electronic circuit)." Pet., 28-29. Annotated Figure 1 below illustrates the operative connection between the "automatic switch module" and cell phone and piconet cordless modules that correspond to the cell phone and piconet cordless modes, respectively. Lipoff, ¶103.



Mooney, Fig. 1 (excerpted, annotated). Thus, Petitioner identifies the components in *Mooney* corresponding to the data conveyance switching element and its operative connections, to the extent any such specificity is required.

Regarding claims 8 and 16, Patent Owner argues that *Mooney* does not disclose being within *close* proximity to its cordless base station. POR, 41-42, 49.

This argument is premised on Patent Owner's erroneous construction of "close proximity" and fails for the same reasons. Section II.B.2.

As explained in the Petition, *Mooney* discloses or renders obvious claims 8 and 16 because *Mooney*'s first data transceiver (a cue receiver) receives "quality" Bluetooth signals from a "piconet front end" and "base unit" (first external data exchange device) when in close proximity to the base unit. Pet., 50. *Mooney* explains that when a caller on the multimode cell phone is "*within range* of the cordless telephone base station that is matched to the cordless telephone mode of the 3-in-1 cell phone," the piconet/Bluetooth cordless module is informed of the signal quality (via its first transceiver/cue receiver), and a call may be established in cordless mode via the BLUETOOTH™ link. Pet., 50-51 (quoting *Mooney*, 2:53-3:7, 4:34-37, 6:18-25, Fig. 2; Ex. 1001, claim 1, [1.h]).

Regarding claim 13, Patent Owner does not address the express mappings in the Petition (Pet., 66-68), let alone explain why *Mooney* does not render obvious "forwarding third data to and displaying said third data on a display screen provided on said cellular phone, wherein said third data is representative of the content of said first data," as recited in claim 13. POR, 46-48. Indeed, Patent Owner does not address "third data" at all. *Id.* Accordingly, these nonresponsive arguments should be rejected.

Regarding [19.i], Patent Owner vaguely alleges that audio tones do not “represent data.” POR, 52. Patent Owner, however, does not refute the Petition’s explanation that “the audio tone is ... representative of the content of second data because it informs the user which pathway will be used to place the call,” and why “a POSITA would have been motivated” with a reasonable expectation of success “to display, e.g., the word *cellular*, on a screen of the multimode phone (in addition to or instead of forwarding audio tones) to notify the user which communication pathway the phone would use.” Pet., 73-74 (citing Lipoff, ¶¶205-206). Accordingly, Patent Owner’s argument should be rejected.

Patent Owner’s other arguments for the remaining claims refer back to claim 1 and are incorrect for the reasons explained for claim 1. POR, 38-53.

V. MOONEY AND LEE RENDER OBVIOUS CLAIMS 1-20

Patent Owner interpretation of *Lee* contradicts *Lee*’s express disclosures. POR, 57-58. *Lee*’s “discovery and/or registration process” is not about updating the location of the device, it is about a device’s internal logic determining whether to use a cellular or Bluetooth network. Pet., 43 (citing *Lee*, 4:56-5:6, Fig. 2, claim 20; Lipoff, ¶131). As the Petition depicted (Pet., 44-45), Figure 2 illustrates a process by which the logic determines to connect to a Bluetooth or cellular network based on Bluetooth signal availability.

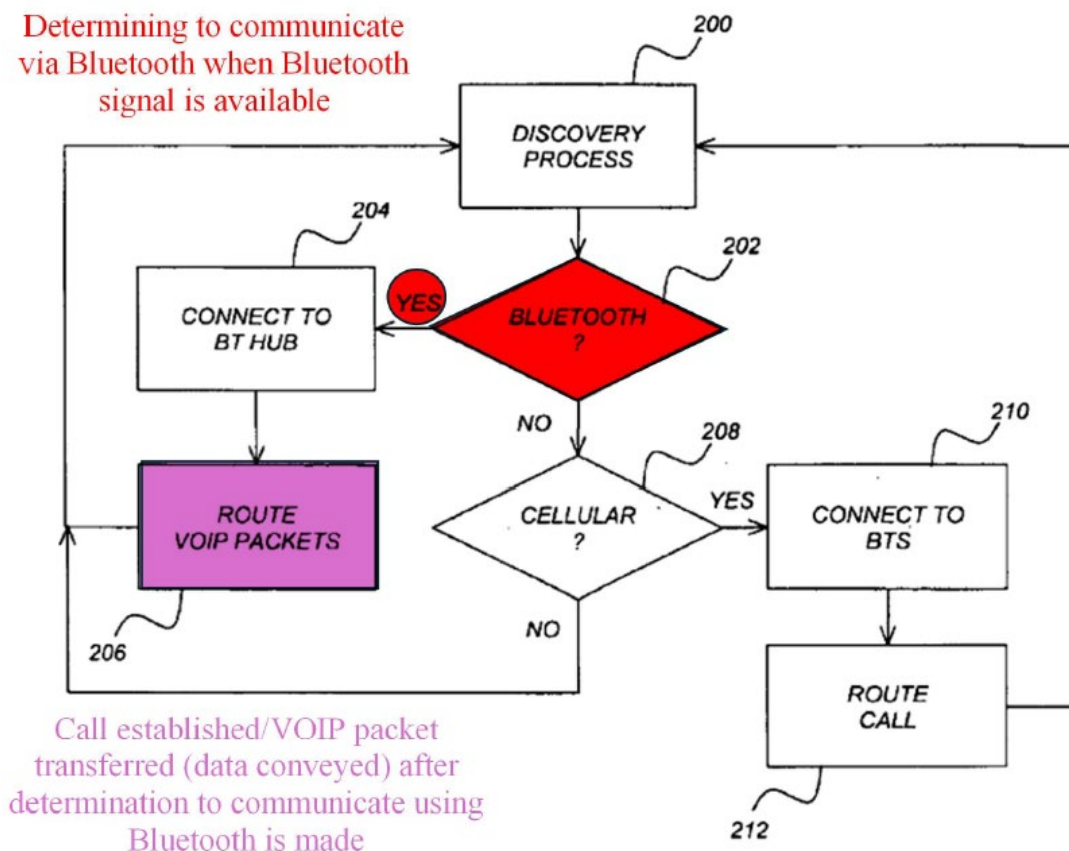


FIG. 2

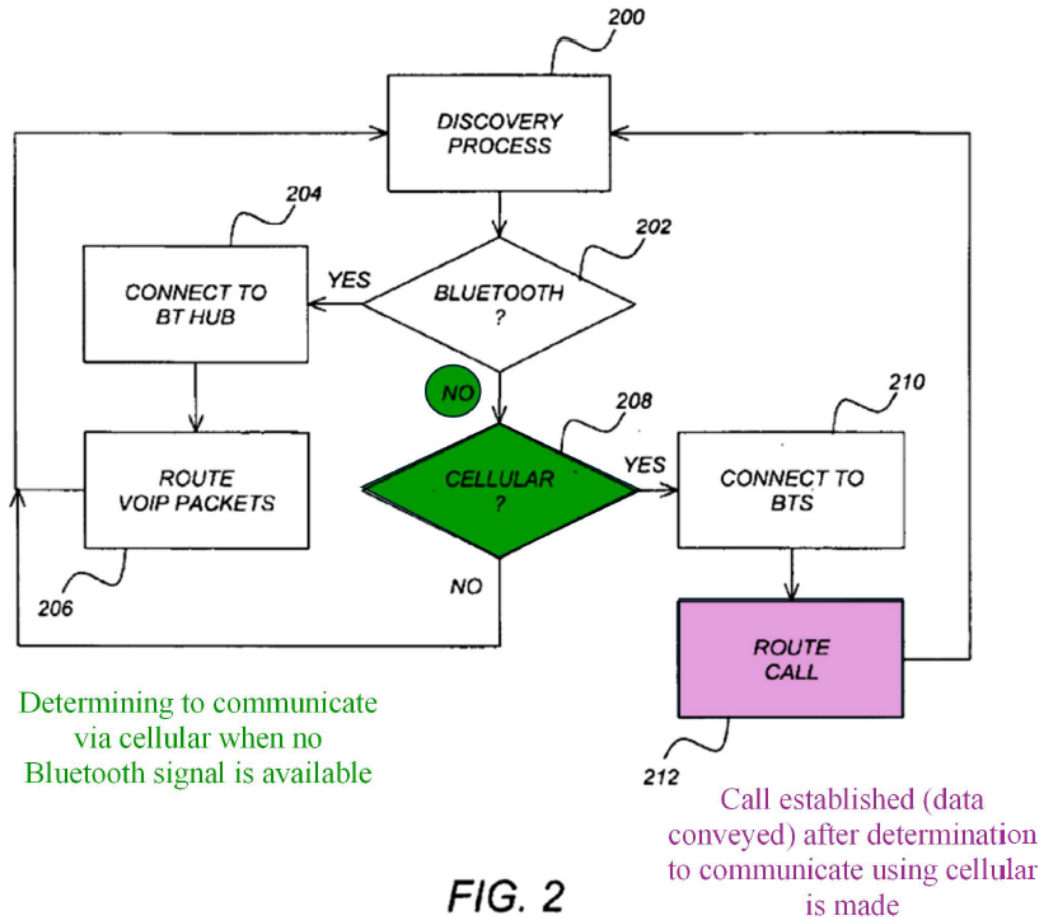


FIG. 2

Lee, Fig. 2 (annotated).

Patent Owner argues that there is no motivation to combine *Lee* and *Mooney* because (1) *Mooney* is dependent upon a PSTN network, while *Lee*'s cellular system would have no need for *Mooney*'s teachings; and (2) congestion is not a problem in *Mooney*. POR, 53-57 (citing Ex. 2001, ¶194). The Board should reject these arguments.

First, Patent Owner improperly attacks the individual references instead of the combination. POR, 57-58 (arguing *Mooney* and *Lee* separately do not disclose disputed element [1.h]). "The question in an obviousness inquiry is whether it

would have been obvious to a [POSITA] to combine the relevant disclosures of the two references, not whether each individual reference discloses all of the necessary elements.” *Palo Alto Networks, Inc. v. Centripetal Networks, LLC*, 122 F.4th 1378, 1386 (Fed. Cir. 2024) (citation omitted). Petitioner’s grounds “implement” *Lee*’s “discovery” process/logic such that *Mooney*’s modified device determines whether to use a cellular or Bluetooth network prior to transmitting its call data. Pet., 46. Thus, Patent Owner improperly dissects the references (POR, 53, 57-58). *Palo Alto Networks*, 122 F.4th at 1386.

Second, the Board should reject Patent Owner’s arguments that are not directed to the combination advanced in the Petition. POR, 54-55. The proposed combination does not integrate *Lee*’s networks, VoIP functionality, or other features, as Patent Owner suggests. *Id.* Petitioner only “implement[s]” *Lee*’s “discovery” process/logic such that *Mooney*’s modified device determines whether to use a cellular or Bluetooth network prior to transmitting its call data. Pet., 46.

Finally, the Board should reject Patent Owner’s argument that there would be “no advantage” to implementing *Lee*’s discovery process/logic in *Mooney*. POR, 56-57. According to Patent Owner, “*Mooney* does not mention congestion being an issue or a concern,” so “Petitioner’s motivation to combine ... is not impacted by the teachings of *Lee*.” *Id.* That *Mooney* does not expressly identify congestion does not demonstrate that a POSITA would not have recognized the

potential for such a problem or have been motivated to address it. *KSR*, 550 U.S. at 418 (noting that “it will be necessary for a court to look to interrelated teachings of multiple patents [A] court can take account of the inferences and creative steps that a [POSITA] would employ.”). Furthermore, Patent Owner’s argument that “congestion can *never* be a problem because *Mooney* is circuit based and does not use shared resources as the cellular approach of *Lee 705*” (POR, 56 (emphasis added)) is highly conclusory and unsupported by its own expert’s opinion. Ex. 2001, ¶194. Nothing in *Mooney* precludes multiple cell phones from connecting to the base unit (and thus sharing the same resource and causing congestion) or suggests that congestion is impossible. Lipoff Reply, ¶84 (discussing how Ex. 2003 supports that congestion would be a problem). Patent Owner also does not dispute that interference issues would have been reduced by implementing *Lee*’s process.

Mooney and *Lee* renders obvious claims 1-20 as detailed in the Petition and reiterated above.

VI. CONCLUSION

Claims 1-20 of the ’294 Patent should be canceled.

Dated: August 25, 2025

Respectfully submitted,

/Erika H. Arner/

Erika H. Arner, Lead Counsel
Reg. No. 57,540

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24, Petitioner certifies that the word count of the foregoing **PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE** as measured by Microsoft Word is 5,596 words, excluding those portions identified in 37 C.F.R. § 42.24(a).

/Erika H. Arner/

Erika H. Arner, Lead Counsel

Reg. No. 57,540

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing **PETITIONER'S
REPLY TO PATENT OWNER'S RESPONSE** was served electronically via
email on August 25, 2025, in its entirety on the following:

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