

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner

v.

INTELLECTUAL VENTURES II LLC.,
Patent Owner

IPR2025-00221
U.S. Patent No. 11,664,889

PETITIONER'S REPLY
U.S. PATENT 11,664,889

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Ex.1062	“Tesla’s ‘American-made’ cars won’t get hit as hard by the auto tariffs,” CNN.com, https://www.cnn.com/2025/03/29/cars/american-made-cars-tesla-auto-tariffs/index.html , retrieved Apr. 14, 2025
Ex.1063	“An Assessment of the Impact of the Inter Partes Review Process under the Patent Trial and Appeal Board on the US Economy,” The Perryman Group, available at https://www.perrymangroup.com/publications/report/2021/9/23/an-assessment-of-the-potential-impact-of-expanding-inter-partes-review-ipr-under-the-america-invents-act-on-the-us-economy/
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Ex.1065	“Tesla’s California Footprint,” https://www.tesla.com/blog/teslas-california-footprint (retrieved Apr. 25, 2025)
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Ex.1067	Notice of <i>Sotera</i> Plus Stipulation for Defendant Tesla, Inc., <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i> , 1:24-cv-884-ADA, ECF No. 59 (WDTX) (May 27, 2025)

Ex.1068	Defendant's Final Invalidity Contentions, <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i> , 1:24-cv-884-ADA (WDTX) (May 22, 2025)
Ex.1069 (NEW)	Deposition Transcript of Dr. Gary R. Lomp, Ph.D., January 12, 2026
Ex.1070 (NEW)	Supplemental Declaration of Michael D. Kotzin, Ph.D.

I. INTRODUCTION

The Petition, supported by Dr. Kotzin's testimony, establishes how the prior art renders obvious challenged claims 1-8 of the '889 patent. In its Patent Owner's Response ("POR" or "Response," Paper 15), Intellectual Ventures II's ("IV") arguments against the prior art in Ground 1 rely entirely on an assumption that a UE in Dateki's transmission power control procedure would intermittently choose to ignore power control information transmitted by the base station. But Dateki explicitly refutes IV's assumption.

For Ground 2, IV does not argue that the prior art fails to teach the claim limitations. Instead, IV argues against the motivation to combine Dateki with Mate, alleging that the Dateki-Mate combination does not address technical requirements for data rates. That argument fails because the data rate requirements IV imposes are not required by the claims, nor are they related to the combined teachings of the prior art.

IV also alleges that the combination of Dateki with Chitrapu (Ground 3) does not teach a claim limitation based on its narrow claim construction that would import several limitations into the claims related to time synchronization. IV's proposed construction fails because IV has identified no intrinsic or extrinsic evidence to support its construction. IV's prior art arguments depend entirely on its erroneous construction. The Board should reject IV's prior art arguments on this basis alone.

Petitioner respectfully requests that the Board confirm the unpatentability of the challenged claims.

II. CLAIM CONSTRUCTION

A. “*extract power control information...from the control message, and...transmit a signal...to a base station...at a transmission power level based on the extracted control information*” (claims 1 and 5)

For this term, IV argues that “‘the extracted power control information’ upon which the UE bases its transmission of a signal [must] be the same power control information extracted from the control message (singular) having power control bits for a plurality of UEs.” POR, 25-26 (emphasis original). IV previously included a nearly verbatim argument in the Preliminary Response (“POPR,” Paper 7). *See* POPR, 25.

Petitioner maintains that this term needs no further construction because IV’s arguments in the Response do not depend upon this explicit construction. For example, unlike the Preliminary Response, the Response does **not** dispute that Dateki’s fractional dedicated physical channel (F-DPCH) transmission power control command (TPCC) message discloses “*a control message...wherein the control message has power control bits for a plurality of UEs*.” *See* POR, 50-57; *compare with* POPR, 59-64. The arguments for Ground 1 in the Response instead narrowly dispute whether the power control bits in the F-DPCH channel are used for power control in the case “where data is being transmitted to the UE on the downlink

traffic channel.” POR, 56-57. As explained below, Dateki is explicit that power control bits in the F-DPCH channel are always used for power control to enable “high-pace transmission power control.” *See, e.g.*, Ex.1005, 11:59-63.

B. “*configured to transmit the signal over the physical control channel when time synchronized and to transmit a signal over a random access channel when not time synchronized*” (claim 4)

IV argues that this limitation “requires that the first UE be configured to make a binary choice depending on whether or not the ‘time synchronized’ condition is met.” POR, 26 (emphasis original). IV contends that the claim language requires a step of transitioning from the “*physical control channel*” to the “*random access channel*” in response to determining that there is not time synchronization. POR, 26. IV further states that “the claim language would not be met by a UE that continued transmitting ‘the signal over the physical control channel’ when there was ‘not time synchronization.’” POR, 26 (emphasis original). IV’s proposed construction should be rejected because it imports multiple requirements that are not recited by the claims or supported by the specification. Ex.1070, ¶¶19-22.

Neither the claims nor the specification describe (i) a “binary choice,” (ii) a step of transitioning from one channel to another, or (iii) a prohibition against ever sending a signal over a “*physical control channel*” when there was not time synchronization. The claim language is clear and needs no construction. Ex.1070, ¶¶19, 22.

IV's singular quote from the specification—even if improperly imported into the claims—does not support IV's construction. The quoted language explains that UEs “automatically **come out of the CELL_ACTIVE state** if the downlink is deemed to be out-of-synchronization (for example, very high downlink errors or low received signal strength).” Ex.1001, 7:38-45; POR, 26. However, IV's proposed construction relates to transmitting a signal on “*a physical control channel*,” not to changes in connection states. IV has not explained why the “CELL_ACTIVE state” is synonymous with transmitting on a “*physical control channel*” in the context of the '889 patent. Further, IV does not point to any intrinsic evidence mandating that a UE can **never** transmit a signal on a “*physical control channel*” if synchronization is lost. It would be improper to import this requirement into the claim. Ex.1070, ¶22.

Further, the quoted “CELL_ACTIVE” language explains that the transition out of the CELL_ACTIVE state occurs when the UE “**deem[s]**” the downlink to be out of synchronization. Ex.1001, 7:38-45. A UE only infers synchronization and thus may not detect “out-of-synchronization” until after synchronization is lost. Ex.1070, ¶22. Accordingly, a UE may indeed transmit a signal after losing synchronization but before such loss of synchronization is detected. Ex.1070, ¶22.

IV's construction is contrary to this conventional understanding of time synchronization and cannot be correct. Ex.1070, ¶21-22. At bottom, IV's construction impermissibly and incorrectly reads the “CELL_ACTIVE” example

from the specification into the claims—a “cardinal sin[] of patent law.” *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1340 (Fed. Cir. 2001). The Board should thus reject IV’s attempt to improperly import unsupported requirements into the claims.

III. DATEKI RENDERS OBVIOUS THE CHALLENGED CLAIMS OF GROUND 1.

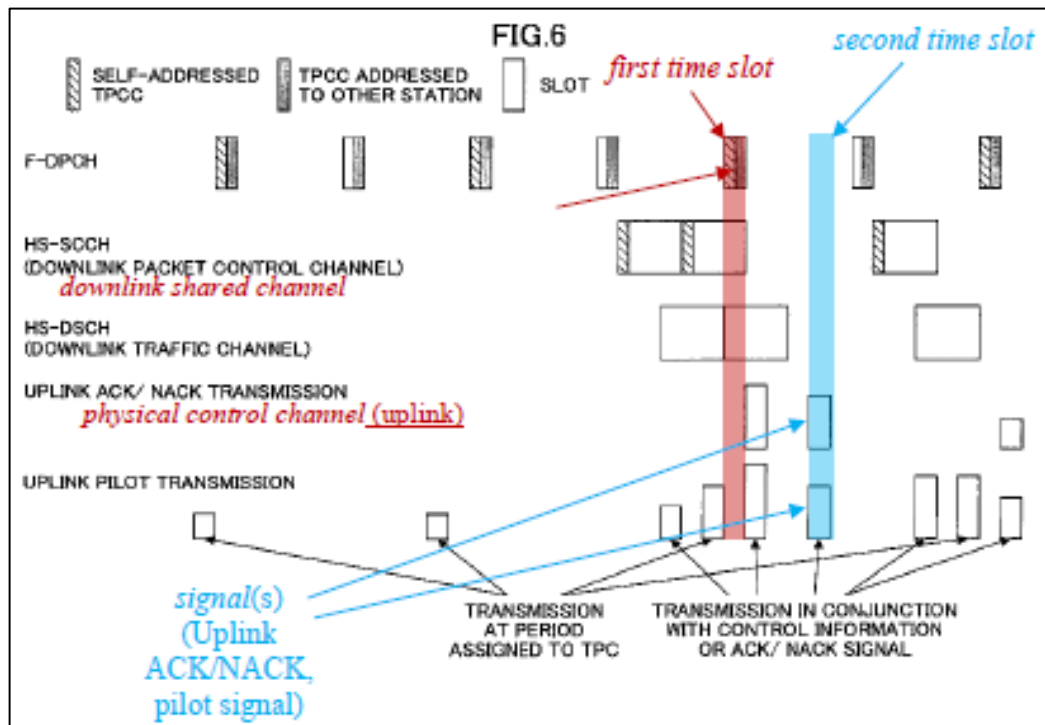
A. Dateki renders obvious “*transmitting, by the UE, a signal over a physical control channel to a base station in a second time slot at a transmission power level based on the extracted power control information.*”.

IV’s arguments for Ground 1 address a single limitation in the independent claims: “*transmitting, by the UE, a signal over a physical control channel to a base station in a second time slot at a transmission power level based on the extracted power control information.*” See POR, 49-57.

IV does not dispute that Dateki’s transmission power control command (TPCC) transmitted on the fractional dedicated physical channel (F-DPCH) is a “control message” carrying “power control bits for a plurality of UEs.” POR, 50-57. Rather, IV theorizes that the UE *intermittently* ignores TPCC information transmitted on the F-DPCH and thus does not use that TPCC’s “power control information” to adjust the “transmission power level” of the “signal” under certain conditions. POR, 50, 56 (alleging that F-DPCH TPCC “is not used for the UE’s transmission power” in the case “where data is being transmitted to the UE on the

downlink traffic channel”). But this argument is based on a mischaracterization of Dateki that is refuted by Dateki itself and by the deposition testimony of its own expert, Dr. Lomp.

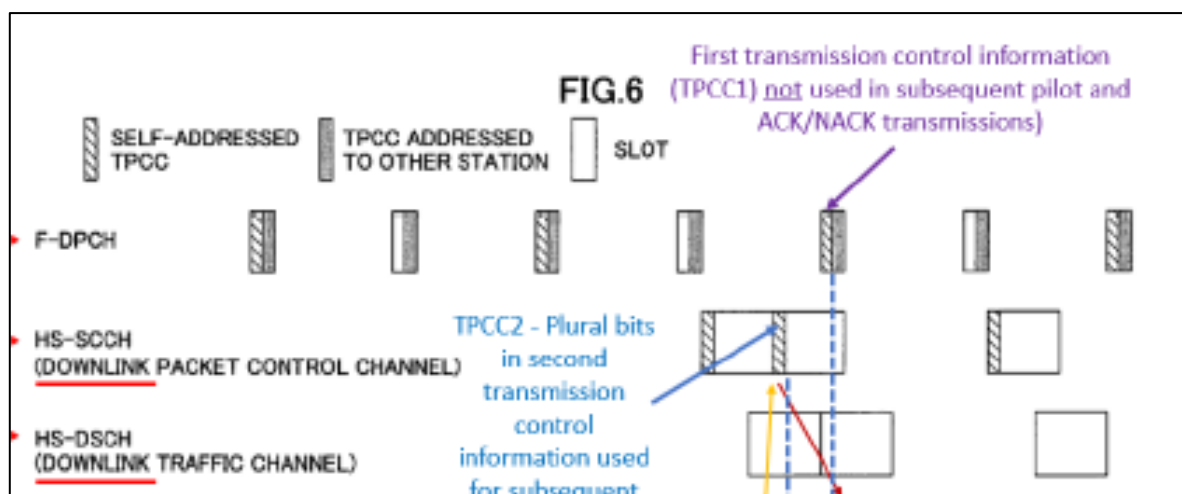
As shown in the below annotation of Dateki's FIG. 6, the Petition shows that the UE in Dateki's power control procedure uses the “*power control information*” provided in the TPCC (“*control message*”) on the F-DPCH at the “*first time slot*” to adjust the transmission power level of the ACK/NACK and pilot signal transmitted in the “*second time slot*.” See Petition, 39-43. IV's arguments to the contrary fail because they are entirely based on its demonstrably false assumptions about Dateki's disclosure.



Petition, 43; Ex.1005, FIG. 6 (annotated); Ex.1003, ¶110.

1. IV mischaracterizes Dateki.

IV argues that the UE ignores, specifically, the TPCC message transmitted on the F-DPCH (shown below in purple as “TPCC1”) when the UE is receiving packets on the high speed-shared control channel (HS-SCCH). POR, 38-48. That TPCC message is the message the Petition maps to the “*control message*” received in the “*first time slot*.” Petition, 32-33. IV’s argument is wrong and mischaracterizes Dateki.



POR, 39 (partial, annotations original)

IV’s assumption that the UE ignores TPCC1 when HS-SCCH is active also requires the Board to accept a second assumption that the base station sends, in place of the ignored TPCC1, a three-stage TPCC2 on the HS-SCCH to account for all of the power adjustments that occur during that time. *See* POR, 44-48. These assumptions are either wholly unsupported or directly contradicted by Dateki.

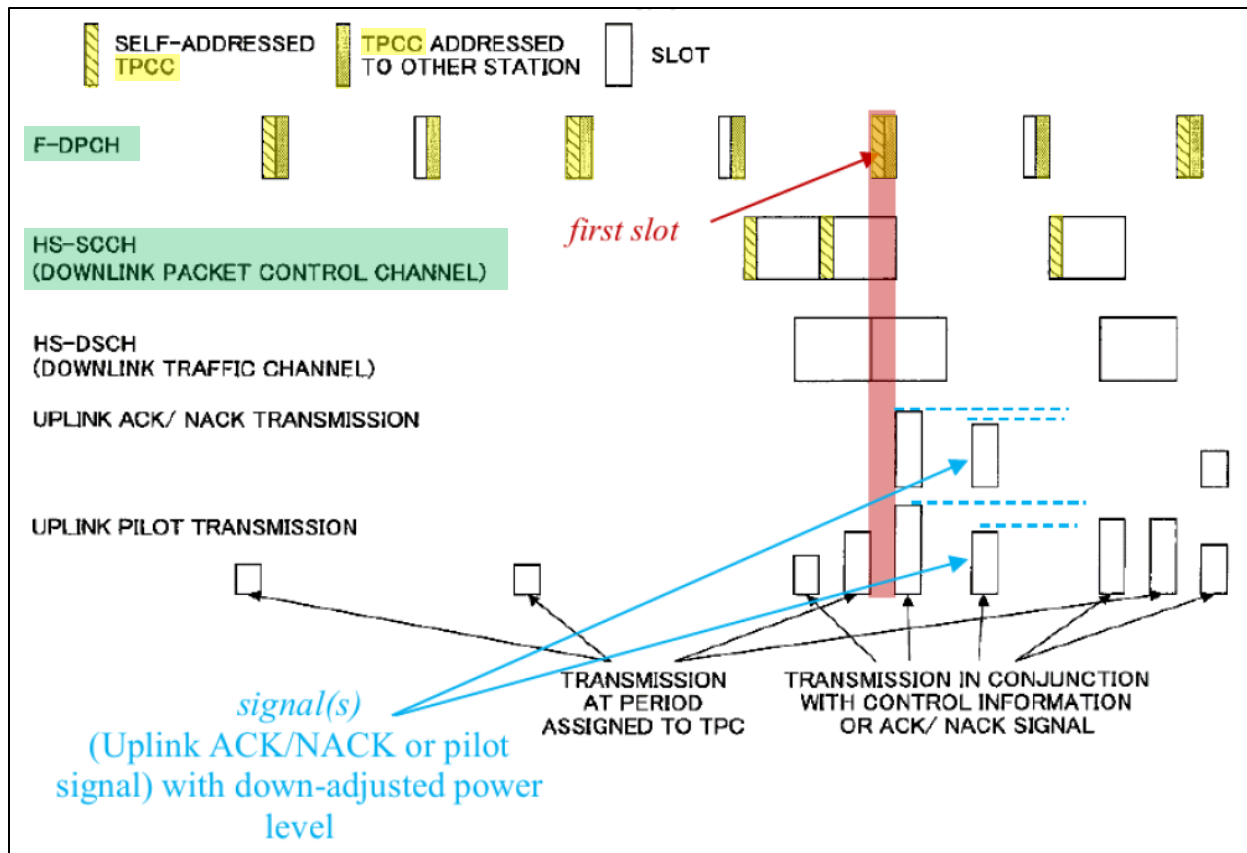
Regarding the first assumption, Dateki's FIG. 6 and the corresponding text show that TPCC information is provided on **both** channels to quickly adjust transmission power when HS-SCCH is active (i.e., during packet transmission) "so that high-packet transmission power control may be conducted." *See* Ex.1005, 11:59-63 ("[W]hen packet transmission is conducted, **the first transmission power control information and the second transmission power control information** are transmitted so that high-packet transmission power control may be conducted"), 12:11-12 ("The TPC bit...is transmitted via the F-DPCH **and** HS-SCCH"). The quoted portions of Dateki in IV's Response confirm that HS-SCCH TPCC information ("TPCC2") may be used to *supplement* the relatively infrequent transmissions of TPCC1 on F-DPCH. Ex.1005, 12:66-13:15 (The base station "transmits the transmission power control information TPCC at relatively long periodic intervals," and "[a]lso, in a case where packet transmission is conducted, the transmission power control information is transmitted via the HS-SCCH as second transmission power control information TPCC at a shorter periodic cycle").

IV's second assumption about a three-stage "plural bit" TPC command is also refuted by Dateki's disclosure. Ex.1005, 14:5-15 (explaining that each HS-SCCH transmission has a single TPC bit). Petitioner addresses each of these false assumptions in turn.

a. Dateki's UE does not ignore transmission power control commands.

As an initial matter, IV's expert, Dr. Lomp, acknowledged during his deposition that the idea that Dateki's UE ignores TPCC1 information is based on an assumption and not on explicit disclosure in Dateki. Ex.1069, 50:9-20 ("[Dateki] doesn't say that [TPCC1] is ignored...it's physically and theoretically possible to use both [TPCC1 and TPCC2]").

Dateki's FIG. 6 (annotated below) illustrates that TPCC commands (highlighted in yellow) are sent by the same base station in **both** the F-DPCH and HS-SCCH channels to adjust transmission power up or down for subsequent ACK/NACK and pilot signals. *See also* Ex.1005, FIG. 6, 10:60-11:14, 12:11-12; Ex.1003, ¶ 104; Ex.1070, ¶26.



Petition, 41 (additional annotations in yellow and green)

Dateki's associated disclosure confirms this: "The TPC bit (transmission power control information) is transmitted **via the F-DPCH and HS-SCCH.**" Ex.1005, 12:11-12 (emphasis added). Dateki is also clear that the UE **uses** both TPCC1 and TPCC2 to adjust the mobile station's transmission power for uplink signals during packet transmission (when HS-SCCH is active) to more quickly update transmission power:

According to an aspect of the present invention, transmission power control information is transmitted at prescribed periodic intervals via a channel for transmitting information including the

transmission power control information, and **when packet transmission is conducted, transmission power control information is also transmitted via a control channel.** When packet transmission is not conducted, the transmission power control information is transmitted via the channel for transmitting...power control information at prescribed intervals that are set to be relatively long, thereby enabling conservation of power.

Ex.1005, 6:61-7:4; *see also id.*, 13:8-11 (explaining that HS-SCCH is active during packet transmission).

Indeed, Dateki explains that the purpose of sending TPC commands on two channels is to allow for faster, more frequent power level adjustments during packet transmission. Ex.1005, 11:56-65 (transmitting both the TPCC1 and TPCC2 allows for “high-pace transmission power control” during packet transmission), 13:1-11. Ignoring one set of TPC commands during packet transmission would be contrary to that purpose. Ex.1070, ¶¶26-28. And in general, Dr. Lomp confirmed in this deposition that a POSITA would have found it to be “a waste of power and resources to send redundant signals.” Ex.1069, 50:9-11, 51:1, 9-13.

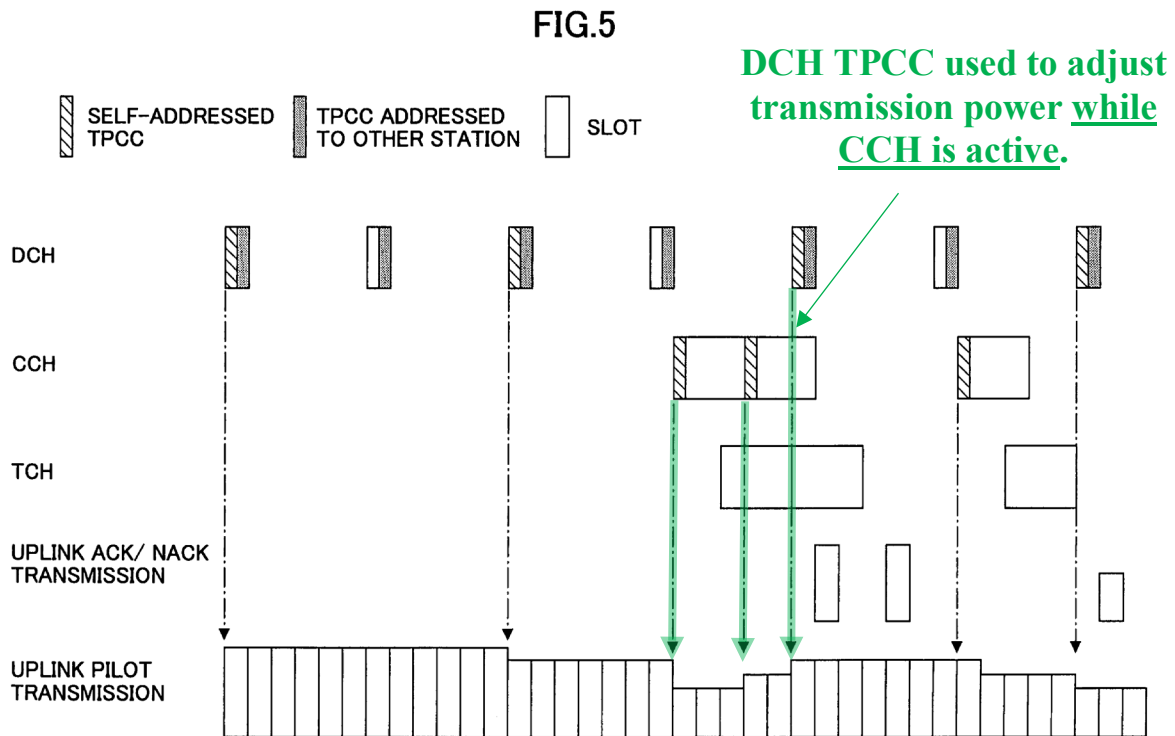
The optional embodiments cited by IV simply explain ways TPCC2 may be used to *supplement* the relatively infrequent transmissions of TPCC1, not to *replace* them. POR, 42-44; Ex.1005, 12:66-13:15 (the base station “[a]lso” transmits power

control information via the HS-SCCH when “packet transmission is conducted”), 13:54-57 (TPCC2 may be “greater in magnitude” than TPCC1 “to swiftly control the transmission power to a desired level” during packet transmission); Ex.1070, ¶¶23-25, 31-33.

In fact, Dateki's only mention of skipping or prioritizing one channel's TPCC information over the other's is an optional example (not relied upon in the Petition) where the base station **refrains from transmitting TPCC2** on the HS-SCCH if the “transmission timing interval with respect to a previous HS-SCCH is longer than the transmission period of the [TPCC1 on F-DPCH].” Ex.1005, 14:36-40. In other words, that example shows that if TPCC information is not intended to be used by the UE, the base station **simply does not transmit it**. IV and Dr. Lomp do not allege that the base station stops transmitting TPCC information on the F-DPCH when HS-SCCH is active, only that the UE ignores it. *See* POR, 42-47 (alleging that TPCC1 is “not used”); Ex.1069, 78:15-80:12 (Dr. Lomp agreeing that the base station continues to transmit TPCC1 while HS-SCCH is active). Moreover, the above optional example illustrates that, if anything, Dateki uses TPCC1 *instead of* TPCC2 when HS-SCCH is active. In no case does Dateki's UE ignore TPCC information from the base station, as IV incorrectly alleges. Ex.1070, ¶¶29-30.

This is further confirmed by Dateki's FIG. 5, which Dr. Lomp agreed is “very similar” to FIG. 6 and which the Petition also cites when addressing this limitation.

See Petition, 41; Ex.1069, 82:10-13 (“[FIG. 5] looks very similar to Figure 6”), 82:18-20, 84:14-85:3. Like FIG. 6, the example in FIG. 5 shows two downlink channels used for transmitting TPCC information: a less frequent periodic TPCC transmission on a dedicated channel (DCH), and a more dynamic TPCC transmission when a control channel (CCH) is active. Ex.1069, 84:14-85:3 (Dr. Lomp agreeing that FIG. 5 shows transmissions that “correspond to [TPCC1 and TPCC2] in Figure 6”). FIG. 5’s arrows explicitly show that **both** sets of TPCC information are used in the time frame when CCH is active—no TPCC information sent to the UE is ignored. *See* Ex.1070, ¶¶34-36.



Ex.1005, FIG. 5 (annotated)

Dateki thus directly contradicts Dr. Lomp's argument that a POSITA would have assumed that the UE ignores TPCC1 because it would be wasteful to do so.¹

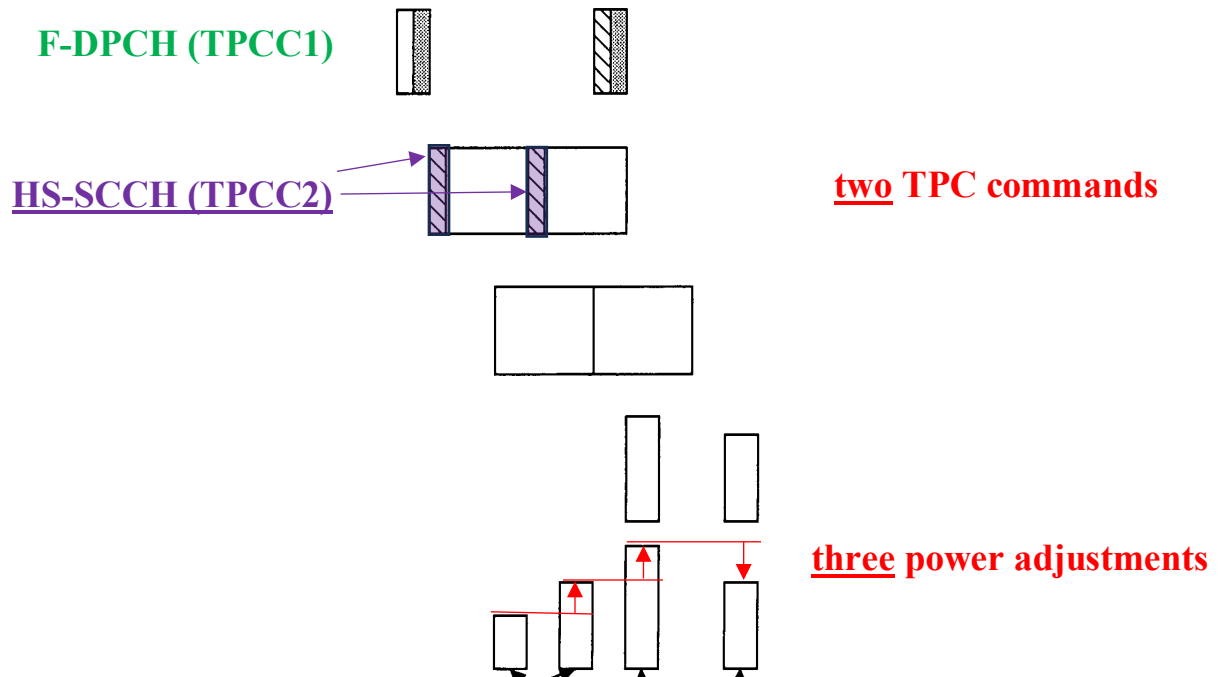
¹ At deposition, Dr. Lomp raised two additional theories about why the UE would ignore TPCC1, neither of which was presented in IV's Response. Ex.1069, 50:16-18, 51:9-16, 80:10-12, 81:1-2 (Dr. Lomp alleging at deposition that TPCC2 on the HS-SCCH is more "accurate" and "reliable" than TPCC1), 62:1-63:2 (alleging that the UE could not send transmissions on both F-DPCH and HS-SCCH because

Petition, 41 (explaining that Dateki's description of FIG. 5 informs FIG. 6); Ex.1069, 53:2-15. There is simply no basis in Dateki for the idea that the UE does not use TPCC1 to control the power level of ACK/NACK and pilot signal transmissions, as IV alleges.

b. Dateki's TPCC2 messages do not have plural bits or plural stages.

Under IV's theory, the UE would apply only the two TPCC messages received in the HS-SCCH. Yet, as shown in the illustration below, *three* uplink power adjustments are made during that time period. Ex.1070, ¶37.

"they're on different codes." Dr. Kotzin's Supplemental Declaration explains that there is no basis for either of these theories. Ex.1070, ¶¶32-34, 48-50.



Ex.1005, FIG. 6 (partial annotated)

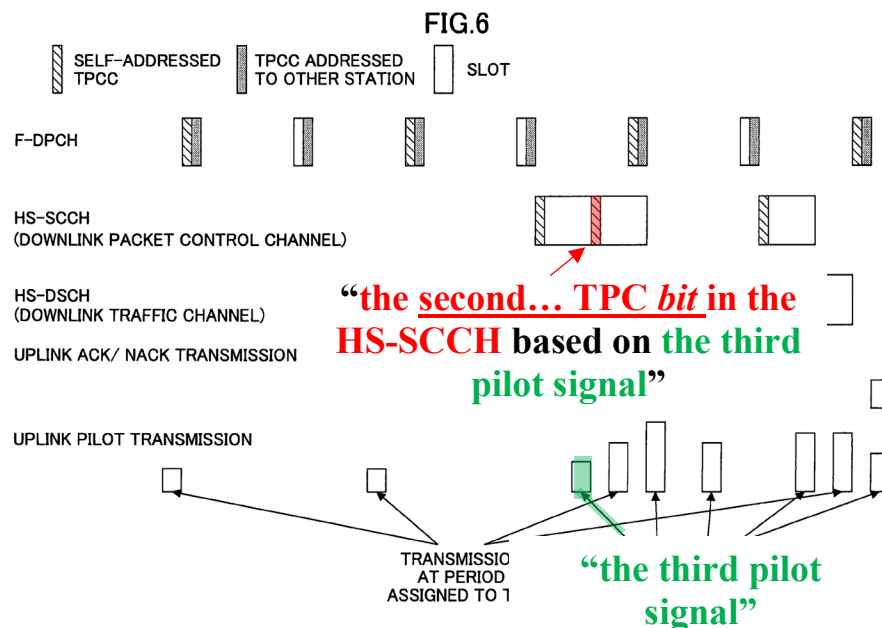
IV explains this discrepancy by speculating that the second TPCC2 instance must be a “plural stage”—more specifically a *three*-stage—TPCC having precisely three transmission power commands. POR, 43-48. Of course, nowhere does Dateki suggest that any plural stage TPC commands are transmitted in FIG. 6. *See* Ex.1005, 7:44-46, 11:66-14:57 (Dateki’s description of FIG. 6); *see also* Ex.1069, 23:20-24:3 (Dr. Lomp admitting that Dateki’s reference to “plural stage” TPC is “background information”), 24:18-25:19. IV’s only basis for this theory is a stray reference in Dateki to “plural stage” TPC commands in a separate portion of Dateki that does not refer to any illustrated embodiment. POR, 37 (citing Ex.1005, 11:15-18). When

asked about this citation, Dr. Lomp admitted that Dateki does not give enough information to explain to explain how a plural stage TPC command would work in the context of Dateki. *See* POR, 37; Ex.1005, 11:15-18; Ex.1069, 46:8-47:9, 49:4-13.

In contrast, Dateki's description of FIG. 6 is explicit that TPCC2 is a single bit TPC command (and not a plural stage command):

It is noted that in the illustrated example of FIG. 6...[w]hen a mobile station receives the third (from the left) pilot signal, the mobile station may generate **the second (from the left) TPC bit in the HS-SCCH** based on the third pilot signal...

Ex.1005, 13:66-14:4; Ex.1070, ¶¶38-39.

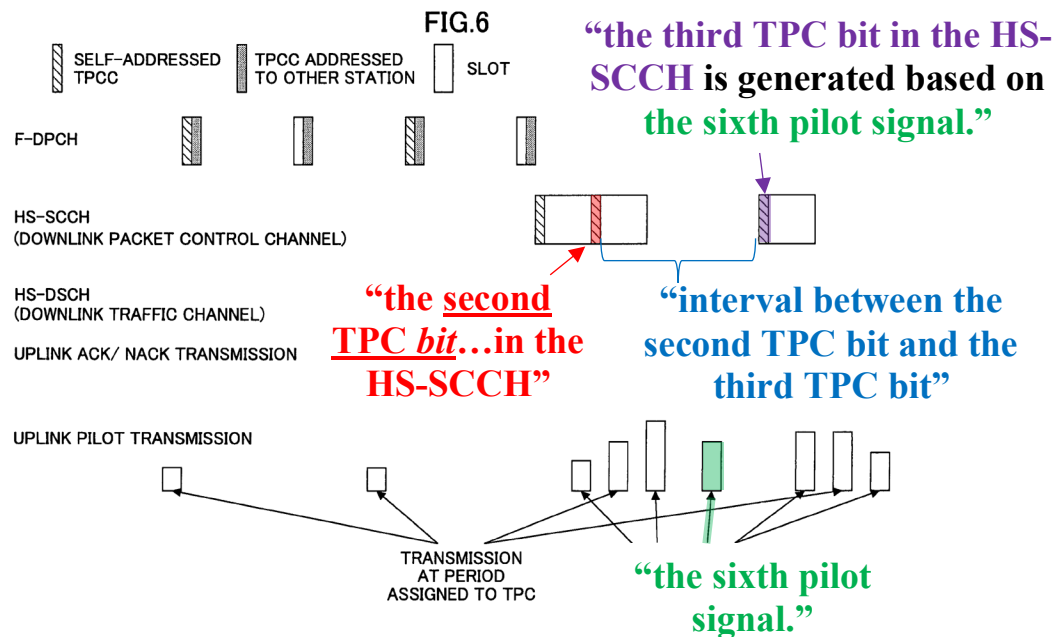


Ex.1005, FIG. 6 (partial annotated)

Dateki's following description confirms the same thing: the second TPCC2 message on HS-SCCH, like the first and the third, is a "TPC bit":

Also, in the illustrated example of FIG. 6, there is an interval between the second TPC bit and the third TPC bit in the HS-SCCH; ... the TPC bit may be generated based on a pilot signal being transmitted at a shorter period compared to the transmission period of the first transmission power control information (e.g., the third TPC bit in the HS-SCCH is generated based on the sixth pilot signal).

Ex.1005, 14:5-15; Ex.1070, ¶40.



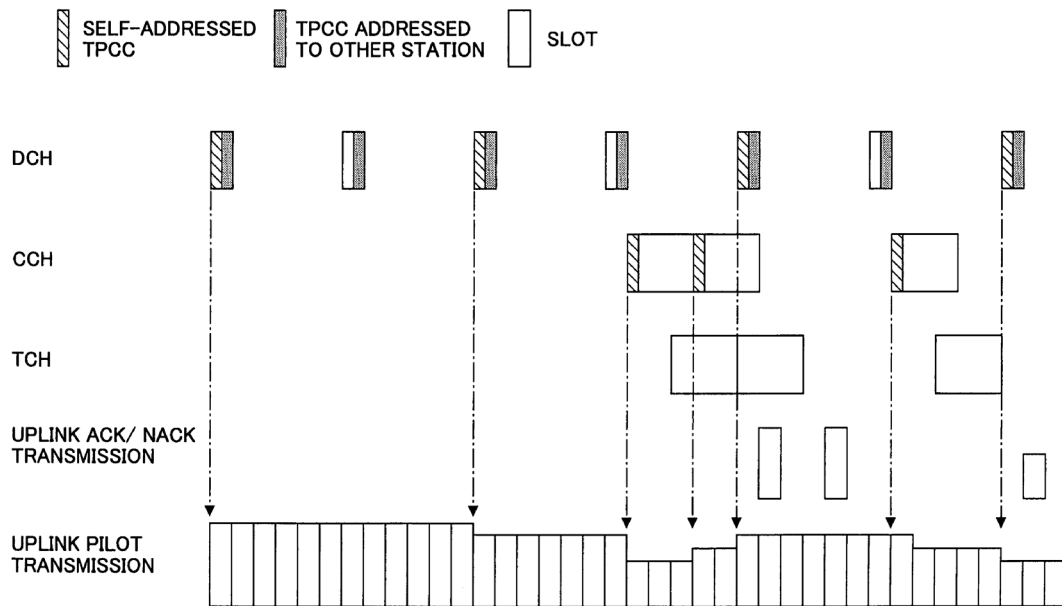
Ex.1005, FIG. 6 (partial annotated)

The Response's twenty-page explanation of FIG. 6 fails to explain the gap between IV's "plural stage" theory and Dateki's description referring to the TPCC2

as a single bit. *See* POR, 27-47; Ex.1070, ¶41. Indeed, IV's theory is nonsensical because it implies that a single TPC command carries contradictory instructions to both increase and decrease power—i.e., two instructions to ***increase*** transmission power and a third instruction to ***decrease*** transmission power. POR, 44-48; Ex.1070, ¶¶42-46 (Dr. Kotzin explaining that IV's plural stage TPC theory of FIG. 6 is nonsensical because the third stage decreasing transmission power would inexplicably nullify one of the first two stages increasing transmission power).

Moreover, IV does not explain why FIG. 6's use of both TPCC1 and TPCC2 should be understood any differently than FIG. 5, which also has TPCC1 and TPCC2, with no "multi-stage" commands whatsoever. *See* Ex.1069, 82:10-20 (Dr. Lomp agreeing that "[FIG. 5] looks very similar to Figure 6"), 84:14-85:3 (Dr. Lomp agreeing that FIG. 5 shows transmissions that "correspond to [TPCC1 and TPCC2] in Figure 6"). As shown below, FIG. 5 shows seven "self-addressed" TPCC messages (4 TPCC1 and 3 TPCC2) that align with seven corresponding power adjustments, indicated by arrows. Ex.1070, ¶47.

FIG.5



Ex.1005, FIG. 5

When asked about FIG. 5 at deposition, however, Dr. Lomp said that he could not “logically say what’s controlling” the power adjustments in FIG. 5, and that the arrows linking every TPC command to a power adjustment was “not clear.” Ex.1069, 85:14-86:2, 86:9-87:5, 88:8-21.

Accordingly, not only is IV’s first assumption—that the UE ignores TPCC1 when HS-SCCH is active—wrong, but so too is its secondary assumption intended to remedy problems created by the first assumption.

The Petition’s mapping to the clear disclosure in Dateki renders obvious “transmitting, by the UE, a signal over a physical control channel to a base station

in a second time slot at a transmission power level based on the extracted power control information.” See Petition, 39-43.

IV. MATE COMBINED WITH DATEKI RENDERS OBVIOUS THE CHALLENGED CLAIMS OF GROUND 2.

A. IV’s arguments are based on alleged “data traffic” requirements that are not relevant to the claims.

IV argues that a POSITA would not have been motivated to combine Mate with Dateki, because a “data traffic channel” must support “data rates between 2-9 kbits/s,” while Mate’s Physical Common Packet Channel (pCPCH) is meant to carry smaller amounts of data. POR, 58. IV’s data rate requirement has nothing to do with the challenged claims, Dateki, or Mate. The relevant claim limitation recites “*data over a physical shared channel,*” not an “uplink data traffic channel.” IV’s arguments do not dispute that Mate’s pCPCH is a “*physical shared channel*” over which “*data*” is transmitted.

IV’s proposed data rate requirement also has nothing to do with the Petition’s combination of Dateki and Mate. IV does not contend that Mate’s pCPCH is a “traffic” channel according to the 3GPP specification or propose a construction of the claimed “*data*” that would require it to be so. Rather, IV’s argument implies that Dateki’s “uplink traffic data”—which the Petition maps to the claimed “*data*”—must be transmitted on a specific traffic channel (TCH) having specific transmission requirements. POR, 58-59; Petition, 52-53; Ex.1005, 10:60-64. This argument is

wrong. IV does not cite any disclosure in Dateki that restricts “uplink traffic data” to any specific uplink “traffic channel,” let alone any traffic channel having the data rate restrictions IV points to. *See* POR, 57-63; Ex.1070, ¶51. Indeed, Dateki only uses the term “traffic channel” to describe *downlink* channels. *See* Ex.1005, 4:23-24, 4:48-51, 5:24-26; 8:6-8, 8:50-51, 11:22, 12:6-7.

Moreover, the sole tertiary reference IV cites for its data rate argument does not remedy the flaw in IV’s argument. IV cites a 3GPP specification document describing data rates for “traffic channels” used to transmit “user data.” POR, 58; Ex.2016. As explained above, IV does not allege that Dateki requires use of any of these traffic channels for its “uplink traffic data.” Nor do the TCH requirements specify any data rates for the pCPCH described in Mate. *See* Ex.2016, 47-48. Further, the 3GPP specification **contradicts** the alleged “2-9 kbits/s” requirement in IV’s Response; two of the listed “traffic channels” (“TCH/F2,4” and “TCH/H2,4”) support data rates of **less than 2 kbits/s**. Ex.2016, 48 (“TCH/F2,4...A full rate data TCH ($\leq 2,4$ kbit/s),” “TCH/H2,4 A half rate data TCH ($\leq 2,4$ kbit/s)"); Ex.1070, ¶52.

IV’s argument is also erroneous on its face because it conflates “data rates” with data *size* (i.e., amount of data). POR, 58-61. IV’s arguments do not allege that the 3GPP specification sets a floor on the *size* of packets that can be transmitted on a TCH.

B. The Petition describes multiple motivations to combine Dateki and Mate.

IV alleges that the Petition provides no reason to combine Dateki with Mate other than the fact that they are “both directed to 3-GPP-standardized UMTS protocols.” POR, 61-62. IV is wrong. The Petition explains that “the pCPCH channel described by Mate **allows the UE to transmit small amounts of data without the need to transition to a cell_DCH state.**” Petition, 50. The Petition cites to multiple paragraphs in Mate that describe these benefits. Petition, 50; Ex.1009, ¶¶ [0043], [0044] (“...the UE maintains the cell_FACH state in the messaging period, without the need of switching to the cell_DCH state.”).

V. CHITRAPU COMBINED WITH DATEKI RENDERS OBVIOUS THE CHALLENGED CLAIMS OF GROUND 3.

A. IV's argument fails because it relies on a flawed claim construction.

IV's arguments for Ground 3 depend entirely on the Board adopting its proposed construction requiring (1) a “binary choice,” (2) an affirmative step of transitioning from transmitting on one channel to transmitting on another channel, and (3) a total prohibition on even a single transmission on the “*physical control channel*” if the UE is out of synchronization. POR, 64-66; *supra*, §II.B. As explained above, that construction is unsupported by the intrinsic evidence and contrary to a POSITA's understanding of time synchronization and connection states. Ex.1070,

¶¶19-22, 53. The Board can therefore reject IV's arguments for Ground 3 on that basis alone.

The motivation for IV's proposed construction becomes clearer in its arguments for Ground 3. Based on its construction, IV alleges that the Petition only shows that Chitrapu's UE "leaves the idle state and transitions to a connected state," but that it must also show that the UE "leav[es] the 'connected state **in response to** losing time synchronization." POR, 65 (emphasis added).

IV is still wrong, even if the claim recited such an "in response to" requirement (which it does not), because IV's characterization of Chitrapu and the Petition's analysis for Ground 3 is incorrect. The Petition shows that Chitrapu discloses "random access procedures for moving a UE **between Idle and connected states,"** and explain that those procedures were "conventional implementation details that a POSITA would have implemented" in Dateki's W-CDMA protocols. Petition, 64, 66. The Petition also refers to Dr. Kotzin's technical background explaining that "the UE moving out of an RRC connected state **when it loses synchronization** is consistent with 3G cellular technologies at the time." Ex.1003, ¶¶48, 149-153; Petition, 60-62. IV has not disputed that testimony from Dr. Kotzin. Ex.1070, ¶¶54-56. Thus, the Petition demonstrates that a UE moving back to the idle state due to losing synchronization was a well-known and expected implementation detail of the W-CDMA state change procedures that Chitrapu describes.

Accordingly, even if IV's construction were adopted, the Petition demonstrates that Chitrapu in combination with Dateki renders the challenged claims of Ground 3 obvious.

VI. PROSECUTION HISTORY

Grasping at straws, IV imports its § 325(d)-related arguments from its request for discretionary denial into the Response, despite IV's request for discretionary denial being rejected. *See* POR, 13-17; Paper 6 (Request for Discretionary Denial), 18-24; *see also* POPR, 14-24. IV spends nearly eight pages again explaining that Dateki and its European counterpart were identified in an earlier PCT office action and in IDSs submitted for various patent applications in the '889 patent's family. POR, 13-21; Paper 6, 18-24. And IV again argues that those initialed IDSs affirm IV's arguments about the merits of Dateki. POR, 13-17; Paper 6, 18-31. The Board should again reject these arguments for the same reasons provided in Petitioner's Opposition. *See* Paper 8 (Petitioner's Opposition to Patent Owner's Request for Discretionary Denial), 30-37.

As shown in more detail in Petitioner's Opposition, there is no evidence that the Examiner evaluated Dateki or appreciated its disclosure other than the Examiner's initials on an IDS that included more than 100 references. *See* Paper 8, 32-33; Ex.1002, 113-119. Moreover, the fact that the Examiner never applied Dateki—despite the PCT examiner finding its disclosure to be novelty-destroying

art for substantially similar claims—indicates that the Examiner erred by not applying it. *See* Paper 8, 32-33, 36; Paper 6, 27-29 (IV emphasizing that the claims rejected by the PCT were substantially similar to the '889 claims). Moreover, as the Board found in the Institution Decision, the Petition demonstrates that Dateki discloses the claim features that led to allowance of the claims. Paper 10, 22; Petition, 35. To the extent IV is arguing that the Board should not consider Dateki at all because it was allegedly already considered (i.e., under a 325(d)-type theory), the Office is clear the Board does not consider discretionary arguments. *See* Interim Director Discretionary Process, I.C, I.E (available at <https://www.uspto.gov/patents/ptab/interim-director-discretionary-process>).

VII. CONCLUSION

For the foregoing reasons, Petitioner requests that all challenged claims be found unpatentable.

Respectfully submitted,

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), Petitioner hereby certifies, in accordance with and reliance on the word count provided by the word-processing system used to prepare this Reply, that the number of words in this paper is 4,528. This word count excludes the table of contents, table of authorities, mandatory notices under §42.8, certificate of service, certificate of word count, signature block, and appendix of exhibits. *See* 37 C.F.R. §42.24(c).

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CERTIFICATE OF SERVICE

The undersigned certifies that, in accordance with 37 C.F.R. § 42.6(e), service was made on Patent Owner as detailed below.

Date of service January 23, 2026

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