

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO. LTD.,
Petitioner,

v.

HEADWATER RESEARCH LLC,
Patent Owner.

Case IPR2023-01226
Patent 10,237,773

PATENT OWNER'S RESPONSE TO THE PETITION

TABLE OF CONTENTS

I.	Introduction.....	1
II.	Overview of the '773 Patent	2
III.	Level of Ordinary Skill in the Art.....	7
IV.	The Board should deny institution because the Petition fails to set forth any plausible theory of invalidity.....	9
	A. The Petition does not explain how a “network service usage control policy” is selected “based at least in part on a current WWAN network busy state.”	10
	1. The theory presented in the Petition is that selecting an action constitutes selecting a “network service usage control policy.”	10
	2. Claim limitation [1.5]’s selection of a policy cannot be satisfied by merely selecting an action, as the Petition’s theory requires.	11
	B. The Petition fails to show how its theory discloses “determin[ing] respective deferred time slots... based on the current service usage control policy.”	17
V.	Conclusion	21

TABLE OF AUTHORITIES

Cases

<i>Nespresso USA, Inc. v. K-Fee Sys. GmbH,</i> IPR2022-01574, Paper No. 9 (PTAB Apr. 10, 2024).....	8
<i>SAS Inst., Inc. v. Iancu,</i> 138 S. Ct. 1348 (2018).....	19

PATENT OWNER’S EXHIBIT LIST

No.	Description
Ex. 2001	U.S. Patent Application Publication No. 2008/0080457 to Cole (“Cole-2”)
Ex. 2002	Redline of the text of Cole (Ex. 1005) and Cole-2 (Ex. 2001)
Ex. 2003	International Publication No. WO 2006/012610 to Rao et al. (“Rao-2”)
Ex. 2004	Redline of the text of Rao (Ex. 1007) and Rao-2 (Ex. 2003)
Ex. 2005	Excerpts from IEEE 100: The Authoritative Dictionary of IEEE Standards Terms (7th ed. 2000)
Ex. 2006	Declaration of Dr. Zygmunt J. Haas in Support of Patent Owner’s Response
Ex. 2007	<i>Curriculum vitae</i> of Dr. Zygmunt J. Haas
Ex. 2008	April 22, 2024 deposition transcript of Patrick Gerard Traynor, Ph.D.

I. Introduction

The sole independent challenged (Claim 1) of the '773 Patent recites, in part, “select[ing] a corresponding service usage control policy” “based at least in part on a current WWAN network busy state.” The only theory presented by the Petition is that selecting an action to take with respect to a particular application activity constitutes selecting the alleged “service usage control policy,” but the Petition fails to explain how selecting an *action* constitutes selecting a *policy*. Indeed, at his deposition Petitioner’s expert **confirmed** that a policy is not merely an action, but is instead the rule that is ultimately used to determine whether an action is taken. Thus, the Petition fails to show how a **policy** (as opposed to an action) is selected “based at least in part on a current WWAN network busy state.”

Claim 1 further recites “determin[ing] respective deferred time slots for each of the background network service usage activities **based on**” the selected “service usage control policy.” But the Petition does not even allege that any deferred timeslots are **based on** the alleged “service usage control policy” (i.e., the selected action). The Petition instead contends that these deferred timeslots are based on “*connectivity prerequisites and network busy state*” (Pet. 35), which are not alleged by the Petition to be the claimed “service usage control policy.” Accordingly, the Petition’s challenges against the sole independent claim fail, and all challenged claims should be found not unpatentable.

II. Overview of the '773 Patent

At a high level, the '773 Patent is directed to a device configured to “receive respective requests from a plurality of applications... to access the WWAN for background network service usage activities”; “based at least in part on a current WWAN network busy state, select a corresponding current service usage control policy for the background network service usage activities”; and “determine respective deferred time slots for each of the background network service usage activities *based on* the current service usage control policy,” such that the background network service usage activities are allowed “to access the WWAN during the respective deferred time slot[s].” *See* Ex. 1001 ('773 Patent), Claim 1.¹

More specifically, the only independent claim (Claim 1) recites in full:

[1pre] A wireless end-user device, comprising:

[1.1] a processor:

[1.2] a Wireless Wide-Area Network (WWAN) modem, to communicate data for network service usage activities between the wireless end-user device and a WWAN; and

[1.3] a non-transitory computer-readable storage medium storing instructions that, when provided to the processor, cause the processor to

¹ All emphases herein are added unless otherwise specified.

[1.4] receive respective requests from a plurality of applications on the device to access the WWAN for background network service usage activities associated with the respective applications,

[1.5] based at least in part on a current WWAN network busy state, select a corresponding current service usage control policy for the background network service usage activities,

[1.6] determine respective deferred time slots for each of the background network service usage activities *based on* the current service usage control policy, wherein at least one such service usage control policy specifies that during a time when the current WWAN network busy state indicates network congestion, a selected subset of the background network service usage activities are deferred until network congestion is no longer indicated, and

[1.7] allow each of the background network service usage activities to access the WWAN during the respective deferred time slot for that background network service usage activity.

As shown by Claim 1, the device is configured to first select a “current service usage control policy” “based at least in part on a current WWAN network busy state” in limitation [1.5], and then to “determine respective deferred time slots... *based on* the [selected] current service usage control policy” in limitation [1.6]. In other words, the policy is first selected, then applied to make decisions regarding how certain activities should be deferred. Ex. 2006 (Haas Decl.), ¶¶29-30.

The specification of the ’773 Patent is consistent with the understanding that a selected policy is applied to make deferral decisions regarding network activity.

For example, the Patent teaches that a “service usage control policy is *used for* assisting in network access control of network service usage activities (e.g., deferring some or all of the network capacity demand from these source activities).” Ex. 1001 at 12:20-23. In other words, the service usage control policy is not itself a decision to defer activities, but is instead *used for* determining whether to defer activities. The ’773 Patent further teaches “associating the network service usage activity with a network service usage control policy based on a classification of the network service usage activity to facilitate differential network access control.” *Id.* at 12:43-57. Thus, the selection of the policy (“associating” the policy with an activity) occurs before the “differential network access control” occurs, which makes sense because the policy must be in place so that decisions can be made regarding how to facilitate the differential network access control. Ex. 2006 (Haas Decl.), ¶¶31-32.

As explained by Patent Owner’s expert Dr. Haas, a selected policy defines how certain activities can be controlled under certain conditions, such that *implementation* of that policy allows for “differentially control[ling] network services traffic,” but the control of traffic is not itself a policy. *Id.* ¶33 (quoting Ex. 1001 at 12:43-45); *see also, e.g., id.* at 13:33-37 (explaining that “block/allow; traffic control techniques, such as throttle, delay, priority queue, time window, suspend, quarantine, kill, remove, and other well known traffic control techniques” are

examples of “**implementation** of a network service usage activity policy”). Ex. 2006 (Haas Decl.), ¶¶32-33.

The understanding that a “policy” is first selected, and then later applied to make specific traffic control decisions, is confirmed by additional disclosures in the ’773 Patent. *See* Ex. 2006 (Haas Decl.), ¶¶34-36. For example, in the embodiment of Figure 9, a “QoS monitoring policy” is applied to a particular session for a service activity by, e.g., a “policy decision point (PDP) agent” (also called a “policy control agent”). Ex. 1001 at 56:56-64. After the relevant policy is selected, “the ***QoS monitoring policy provides commands/instructions to a policy enforcement point (PEP) (e.g., PEP agent***, also referred to herein as a policy implementation agent) for managing/enforcing the new QoS priorities/sessions.” *Id.* at 56:64-57:1. The PEP agent thus uses the commands/instructions associated with a given policy to enforce the policy, by “determin[ing] whether the allow, block, throttle, and/or queue priority (e.g., and/or otherwise control using various traffic control related techniques) a session based on the QoS monitoring policy.” *Id.* at 57:1-5. In other words, the policy is first ***selected*** by the “policy decision point (PDP) agent,” and then separately and subsequently ***applied*** by the “policy enforcement point (PEP” or “policy implementation” agent. Ex. 2006 (Haas Decl.), ¶34.

Likewise, the specification similarly discusses a “priority policy” that is “based on the relative priority of each service class, the relative priority of each QoS

service activity, or a combination of the relative priority of each QoS service class and each QoS service activity.” Ex. 1001 at 20:7-20. The specification further explains that “these relative priority policies can vary from device to device based on... network busy state[] and/or other criteria/measures” (*id.*), thus showing that the network busy state is actually used to decide which policy (e.g., a set of rules defining which activities should receive priority) is applicable, and not merely to evaluate how the policy should be applied on a case-by-case basis. Ex. 2006 (Haas Decl.), ¶35.

The specification gives a further example of a “policy” that is implemented “on the devices connected to busy base stations” wherein “the device is allowed to browse or conduct other best effort service activities at a relatively high throttling rate for a period of time, but if the device uses more than a certain amount of service... in a certain period of time then the device may be traffic controlled according to an adaptive throttling policy as described herein.” Ex. 1001 at 26:9-20. This shows how a network busy state is used to determine the applicable policy, and not merely to determine what policy-based action to take. *See* Ex. 2006 (Haas Decl.), ¶36; *cf.* Ex. 1001 at 27:47-67 (discussing selecting a policy based on “the type of network the device is connected to”).

Thus, at a high level, the specification teaches that a policy (which contains a set of rules, e.g., defined in a set of “commands/instructions associated with a given

policy”) is first selected, and then the policy is **enforced** by applying the commands/instructions to “determin[e] whether to” take certain actions with regard to traffic, such as “to allow, block, throttle, and/or queue priority” for traffic “based on the QoS monitoring policy.” *Id.* at 56:56-57:5. This is consistent with the claim language, which recites in step [1.5] “select[ing] a corresponding current service usage control policy” “based at least in part on a current WWAN network busy state,” and then in subsequent step [1.6] “determin[ing] respective deferred time slots for [activities] **based on** the current service usage control policy.” *Id.* at Claim 1; Ex. 2006 (Haas Decl.), ¶37.

III. Level of Ordinary Skill in the Art

The Petition proposes that a POSITA in the field of the ’773 Patent “would have had (1) at least a bachelor’s degree in computer science, electrical engineering, or a related field, and (2) at least two years industry experience in services and application implementation in communication networks. Additional graduate education could substitute for professional experience, and *vice versa*.” Pet. at 3 (citing Ex. 1003 ¶¶22-23). However, the Petition provides no evidence for this proposed level of skill in the art, because the cited portions of Petitioner’s expert Dr. Traynor provide an entirely **different** skill level for a POSITA.

In contrast to the Petition, Petitioner’s expert Dr. Traynor proposes that a POSITA in the field of the ’773 Patent “would have had (1) at least a bachelor’s

degree in computer science, electrical engineering, or related field, and (2) three to five years of experience with networking, power consumption of networked computing devices, and/or wireless digital communications systems. Additional graduate education could substitute for professional experience, and *vice versa*.” Ex. 1003 ¶22.

Patent Owner believes that Dr. Traynor’s stated level of skill is too vague. For example, it is unclear why Dr. Traynor proposes “three to five years of experience,” when three years of experience plainly qualifies a person as a POSITA under Dr. Traynor’s definition. And Dr. Traynor’s proposal that “[a]dditional graduate education could substitute for professional experience, and *vice versa*” also lacks clarity. *See Nespresso USA, Inc. v. K-Fee Sys. GmbH*, IPR2022-01574, Paper No. 9 (PTAB Apr. 10, 2024). (“As for [the contention] that ‘[a]dditional education might substitute for some of the experience, and substantial experience might substitute for some of the educational background,’ we find that this characterization is too vague.”).

For purposes of this response, Patent Owner agrees that a person having a bachelor’s degree in computer science, electrical engineering, or a related field, plus at least three years of experience with networking, power consumption of networked computing devices, and/or wireless digital communication systems qualifies as a

POSITA. The three years of additional experience can be in either a professional setting or a research setting. *See* Ex. 2006 (Haas Decl.) ¶27.

IV. The Board should deny institution because the Petition fails to set forth any plausible theory of invalidity.

The Petition’s only theory as to how claim limitation [1.5]’s recitation of “select[ing] a corresponding service usage control policy” “based at least in part on a current WWAN network busy state” is satisfied is based on Cole. Specifically, the Petition contends that selecting particular actions to manage load on a network connection constitutes the claimed “select[ing] a corresponding service usage control policy.” *See* Pet. 31 (“Cole’s management of actions (‘*service usage control policies*’) is implemented by the connection manager, executed by the processor, which ‘*select[s]*’ these actions when ‘the monitored load exceeds a predetermined threshold’) (‘*based at least in part on a current WWAN network busy state*’).”) (emphases in original, quoting Ex. 1005 ¶¶73, 75). In other words, the Petition contends that selecting an *action* constitutes selecting a *policy*, a position that is at odds with the testimony of *both* parties’ experts.

Furthermore, even if the Petition’s selection of an action to manage a connection load *could* constitute selecting a policy (it cannot), the Petition never explains how its proposed combination “determine[s] respective deferred time slots for each of the background network service usage activities *based on*” the selected “service usage control policy,” as required by claim limitation [1.6]. Instead, the

Petition alleges that these deferred timeslots are based on “*connectivity prerequisites and network busy state*” (Pet. 35), which the Petition does not allege to be the claimed “service usage control policy.”

Thus, the Petition fails to provide any theory under which Claim 1 is unpatentable. Because all other challenged claims depend from Claim 1, all challenged claims should be found not unpatentable.

A. The Petition does not explain how a “network service usage control policy” is selected “based at least in part on a current WWAN network busy state.”

1. The theory presented in the Petition is that selecting an action constitutes selecting a “network service usage control policy.”

Claim limitation [1.5] of the ’733 Patent recites “*based at least in part on a current WWAN network busy state, select a corresponding current **service usage control policy** for the background network service usage activities.*” See Pet. at 4. Limitation [1.5] is recited separately from determining *actions* taken pursuant to the policy, a concept recited in limitation [1.6]. Claim 1 at 107:50-52. (“determine respective deferred time slots for each of the network service usage activities **based on** the current service usage control policy...”). Ex. 2006 (Haas Decl.), ¶39; *see also* Section II, *supra* (discussing the difference between selecting a policy and enforcing a policy by selecting actions to take pursuant to the policy).

The Petition relies solely on Cole for limitation [1.5]. *See* Pet. at 29-33 (only prior art citations to Cole, Ex. 1005). Specifically, the Petition alleges that Cole’s “actions to manage the [connection] load” are “service usage control policies.” Pet. 31 (referring to “Cole’s management of actions (‘service usage control policies’)”); *id.* at 30 (“Cole describes that, ‘[w]hen the monitored load exceeds a predetermined threshold,’ the connection manager ‘may take one of several actions to manage the load.’”) (quoting Ex. 1005 ¶75). The Petition further alleges that the selection of these *actions* (e.g., selection of a postponement action) based on a network busy state constitutes selecting a service usage control policy “based at least in part on a current WWAN network busy state.” Pet. 31 (“Cole’s management of actions (‘*service usage control policies*’) is implemented by the connection manager, executed by the processor, which ‘*select[s]*’ these actions when ‘the monitored load exceeds a predetermined threshold’) (‘*based at least in part on a current WWAN network busy state*’).”) (emphases in original, quoting Ex. 1005 ¶¶73, 75).

2. Claim limitation [1.5]’s selection of a policy cannot be satisfied by merely selecting an action, as the Petition’s theory requires.

Despite relying on the selection of an action to take to manage the load on a connection as the claimed “select[ion] [of] a corresponding network service usage control policy,” the Petition, provides no meaningful discussion as to how *selecting an action* to take constitutes the plain meaning of a “*select[ing] a... service usage*

control policy.” See generally Pet. at 29-33. Not could it have done so, because the plain meaning of a “policy” is **not** an action but is instead a rule or set of rules that is **used** to select which action to take. See Section II (citing Ex. 1001 at 12:20-23, 12:43-57, 13:33-37, 56:56-57:6); Ex. 2006 (Haas Decl.) ¶¶40-41.

The claim language itself also shows that a policy is used to make decisions about how to manage activity (e.g., the policy is used to determine how what action to take), and that the determination of what action to take is not **itself** the policy but is rather **based on** a policy. See Ex. 1001 at 107:50-52 (Claim 1 reciting “determin[ing] respective deferred time slots for each of the network service usage activities **based on the current service usage control policy**”); Ex. 2006 (Haas Decl.) ¶¶42.

The ’773 Patent’s description of a policy as distinct from actions taken pursuant to the policy is also consistent with extrinsic evidence. For example, the IEEE dictionary defines a “scheduling policy” as “[a] **set of rules** that is **used to determine** the order of execution of threads,” and states that “a scheduling policy affects thread ordering” in “scheduling-policy-defined circumstances.” Ex. 2005 at 3. In contrast, the same dictionary defines the act of “scheduling” as the “**application of a policy** to select a runnable thread to become a running thread.” *Id.* Thus, the policy defines when certain actions will be taken, and those actions are taken as a result of applying the policy, consistent with the disclosure of the ’773 Patent.

Accordingly, the **implementation** of a policy (i.e., actually taking an action pursuant to a policy) is not the same as the **selection** of a policy. Ex. 2006 (Haas Decl.) ¶43.

Indeed, Petitioner’s own expert agrees with this understanding. Specifically, Dr. Traynor testified that the policy includes the **rule** or **condition** that determines whether a particular action will be taken:

Q. Okay. So the delay action taken in response [to a network busy state] would be part of the policy, correct?

A. Just to be clear[,] *[w]e have this condition, and here in 1.5 it’s—the condition is based, at least in part, on a network busy state.* So I assume it could potentially be other things. But we’ve got possibly some kind of overload or large amounts of packets being dropped, any of the things that could make up a busy state, *then we have an action that goes with that. Those two things together would make up the policy.*

Ex. 2008 at 47:5-48:4 (emphases added).

In contrast to the above understanding, where the policy is not simply an action but also includes a rule that determines when a particular action will be taken, the Petition’s identified “selecting a policy” is merely “selecting an **action**” to take. *See* Pet. 31 (alleging that the action is selected “based at least in part on a current WWAN network busy state”). Selecting an action to take, however, is not selection of a “policy,” but is at most the **application** of a policy. Ex. 2006 (Haas Decl.) ¶45. And whatever actual *policy* is used to make decisions about Cole’s management of

actions, the Petition sets forth no theory under which that *policy* is selected “*based at least in part on a current WWAN network busy state*” as required by Claim 1. Ex. 2006 (Haas Decl.) ¶45.

By way of analogy, a dealership may have a warranty applicable to all new car purchases that includes a 50,000 mile warranty. The determination of what warranty payout (i.e., “action”) should be taken on a claim is based at least in part on how many miles are on the car at the time a claim is made. Ex. 2006 (Haas Decl.) ¶46. However, the selection of the warranty policy itself is ***not*** based on the car’s mileage; the warranty policy was selected solely based on the standard purchase agreement of the car dealership and the consumer’s decision to purchase the car. *Id.* Similarly, the Petition provides no explanation how Cole’s policy (which Dr. Traynor acknowledges itself includes evaluating a network busy state) is ***selected*** based on a network busy state, rather than merely requiring evaluation of a network busy state to determine what action should be taken. *Id.* ¶47.

The ’773 Patent specification similarly discusses a “priority policy” which is “based on the relative priority of each service class, the relative priority of each QoS service activity, or a combination of the relative priority of each QoS service class and each QoS service activity.” Ex. 1001 at 20:7-20. A POSITA would realize that these QoS policies are actually rules that determine which types of activities have priority over other types of activities. The specification further explains that “***these***

relative priority policies can vary from device to device *based on... network busy state*[] and/or other criteria/measures.” *Id.* Thus, the ’773 Patent discloses, consistent with the claim language, that the network busy state is actually used to decide which policy (e.g., a set of rules defining which activities should receive priority) is applicable, and not merely to determine what action should be taken. Ex. 2006 (Haas Decl.) ¶48.

In an attempt to avoid this deficiency, the Petition seems to take the view that the ’773 Patent itself redefines the plain meaning of selecting a *policy* to encompass selecting an *action* to manage load on a connection. *See* Pet. at 30 (“The management of actions in Cole is consistent with the ’773 patent’s description of a ‘*service usage control policy*’....”) (citing Ex. 1001, 12:20-23). But the cited portion of the ’773 Patent makes clear that selecting activities (e.g., “deferring some or all of the network capacity demand from these source activities”) is not itself the *selection* of a policy, but results from the *usage* of a policy to assist in controlling activity. *See* Ex. 1001, 12:20-23 (“[A] service usage control policy is *used for assisting in network access control of network service usage activities* (e.g., deferring some or all of the network capacity demand from these source activities).”). In this discussion, the selection of what activity to take is the “control of network service usage activities,” *not the selection of a policy* that is used for assisting in such control. Thus, this passage simply reinforces the plain meaning of a policy as not

itself constituting the management of actions, and certainly does not constitute disclaimer or lexicography such that management of actions constitutes the selection of a policy, as the Petition’s theory would require. Ex. 2006 (Haas Decl.) ¶49.

In sum, the Petition cannot show that limitation [1.5] is met because it cannot show that a “network service usage control policy” is selected “based at least in part on a current WWAN network busy state.” The Petition has, at most, set forth evidence that some sort of policy exists (which policy may *include* the evaluation of a network busy state), but provides no evidence that any policy is *selected* based at least in part on a network busy state. *See* Ex. 2006 (Haas Decl.) ¶¶39-50.

The Board’s institution decision implies that “selecting” a policy requires no more than simply selecting an action. *See* Paper No. 9 at 12 (“To the extent Patent Owner is suggesting that a processor ‘selecting’ a policy requires more than such actions, Patent Owner points to nothing in claim 1’s language or the specification that suggests such a narrow construction.”). But this is contrary to all evidence of record, *including* the testimony of Petitioner’s expert who made clear that the service usage control “policy” that is selected would need to include not just an action, but a “condition” for selecting the action. Ex. 2008 at 47:5-48:4. And the Petition presents no theory as to how that more complete understanding of a service usage control policy would be selected “based at least in part on a network busy state.” *See* Ex. 2006 (Haas Decl.) ¶¶39-50.

B. The Petition fails to show how its theory discloses “determin[ing] respective deferred time slots... based on the current service usage control policy.”

The “network service usage control policy” in Claim 1 of the ’773 Patent must be used to determine “respective deferred time slots for each of the network service usage activities.” ’773 Patent at Claim 1 (“instructions that... cause the processor to... determine respective deferred time slots for each of the background network service usage activities *based on the current service usage control policy*”).

The Petition relies solely on Cole for this requirement, and alleges that it is met because the “‘respective deferred time slots’ are... ‘based on the current service usage control policy,’ as the timeslots selected by [Cole’s system] take into consideration connectivity prerequisites and network busy state.” Pet. 35.

In other words, the Petition alleges that the deferred time slots are “based on the current service usage control policy” because they are based on “connectivity prerequisites and network busy state.” *Id.* But under the theory set forth in the Petition, “connectivity prerequisites and network busy state” are *not even alleged to be* “the current service usage control policy”—rather, as the Petition makes clear that under its theory, the “service usage control policy” is simply a particular action that is selected. *See, e.g.,* Pet. at 31 (“Cole’s management of actions ‘*service usage control policies*’ is implemented by the connection manager, executed by the processor, which ‘select[s]’ these actions when ‘the monitored load exceeds a

predetermined threshold’”) (underlining added, other emphasis in original); *id.* at 30 (Cole describes that, ‘[f]or certain background tasks, the connection manager . . . may postpone the actions automatically’ (‘*select a current corresponding service usage control policy*’ for the ‘background network service usage activities’”) (underlining added, other emphasis in original); *id.* (“The management of actions in Cole is consistent with the ’773 patent’s description of a ‘*service usage control policy*’”) (underlining added, other emphasis in original) (citing Ex. 1001, 12:20-23); Ex. 2006 (Haas Decl.) ¶¶51-53.

The Petition does not even allege, much less show, that “respective deferred time slots” are “based on” what the Petition alleges to be the claimed “service usage control policy” (i.e., the selected action). Furthermore, as explained above in Section IV.A, if the “network busy state” *is* part of the “service usage control policy” (a theory not advanced by the Petition), there is still no explanation of how the network busy state would be used to *select* the service usage control policy. Ex. 2006 (Haas Decl.) ¶¶54-55.

Accordingly, even if selecting an action (as opposed to selecting a policy) *could* constitute the claimed selecting of a “service usage control policy” (as explained in Section IV.A, it does not), the Petition has failed to set forth any theory regarding how “respective deferred time slots” would be “determine[d]” “*based on*”

the allegedly selected policy (according to the Petition, an action to be taken). Ex. 2006 (Haas Decl.) ¶56.

Patent Owner acknowledges that in the Board’s Institution Decision, the Board preliminarily concluded that this limitation is satisfied because Cole’s selection of which action to take “is a necessary predicate to determining deferred time slots,” and “the rescheduling action always follows the policy selection [i.e., the selection of what action to take] based on network load.” Paper No. 9 at 13. This theory does not support a finding of unpatentability for two distinct reasons.

First, this is a theory not articulated in the Petition. As explained above, the Petition is completely silent as to how determination of a deferred time slot is “based on the current service usage control policy” that the Petition relies on for limitation 1.5]. *See* Pet. 35 (alleging only that Cole “take[s] into consideration connectivity prerequisites and network busy state,” neither of which are alleged to be “the current service usage control policy”); *see SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018) (“[T]he petitioner's petition, not the Director's discretion, is supposed to guide the life of the litigation.”). Similar to the rationale underlying the *SAS* decision, “it would have made little sense for Congress to insist on a response *to the petition* if, in truth, the Director enjoyed the discretion” to substitute its own rationales of invalidity for the rationales presented in the Petition. *Cf. id.*

In any event, the rationale in the institution decision would not support an invalidity finding even if it *had* been raised by the Petition. “[D]etermin[ing] respective deferred time slots... *based on the current service usage control policy*” does not mean that the determination of deferred time slots “always follows” the selection of the policy or that selection of the policy is “a necessary predicate to determining deferred time slots.” Paper No. 9 at 13. Instead, it means that the claimed “determin[ing]” must take the “current service usage control policy” into account; *i.e.*, the service usage control policy is used as a relevant input regarding how the respective deferred time slots are determined. Ex. 2006 (Haas Decl.) ¶¶57-58.

By way of example, a jury’s verdict in a criminal trial “always follows” a grand jury charge, and the grand jury charge is a “necessary predicate” to a jury’s determination of guilt. But the jury’s determination of guilt is not “based on” the grand jury charge, because it doesn’t use the grand jury charge as a basis for the verdict; *i.e.*, the trial jury does not base their determination of guilt in any way on what the grand jury did. To use a more technical analogy, a secure mobile device’s determination of a cryptographic key used for sending encrypted messages may “always follow” the user turning the device on, but the user’s turning the device on is not an input into the calculation of the cryptographic key; rather, the key would be determined, for example, based on a system clock and an encryption algorithm

(and not based on a previous power on action that is not used as an input to the determination). Ex. 2006 (Haas Decl.) ¶59.

In sum, the Petition does not even allege that the deferred time slots would be determined based on what the Petition alleges to be the “service usage control policy,” as required by all challenged claims. Instead, the Petition alleges the deferred time slots are determined based on “connectivity prerequisites and network busy states” (*see* Pet. 35), which are never alleged to be a “service usage control policy.” And the rationale in the Board’s Institution Decision cannot cure this deficiency of the Petition. Accordingly, the Petition cannot show that its combination discloses limitation [1.6].

V. Conclusion

All challenged claims should be found not unpatentable for two independent reasons.

First, because the Petition incorrectly relies upon selection of an *action* as constituting the claimed selection of a *policy*, contrary to the plain meaning of that term as confirmed by both parties’ experts, the Petition fails to present any theory under which the selection of a *policy* is “based at least in part on a current WWAN network busy state” as required by limitation [1.5].

Second, even if selection of an action *were* selection of a policy as the Petition’s limitation [1.5] theory requires, the Petition sets forth no theory under

which the prior art “determine[s] respective deferred time slots... *based on* the current service usage control policy” as required. Instead, the Petition merely alleges that the claimed determination “take[s] into consideration connectivity prerequisites and network busy state” (Pet. 35), neither of which are alleged to be a “policy.”

Date: May 16, 2024

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CERTIFICATION REGARDING WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), Patent Owner certifies that there are 5,125 words in the paper excluding the portions exempted under 37 C.F.R. §42.24(a)(1).

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CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e)(1))

The undersigned hereby certifies that the above document was served on May 16, 2024, by filing this document through the Patent Trial and Appeal Case Tracking System as well as delivering a copy via electronic mail upon the following attorneys of record for the Petitioner:

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