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 PRELIMINARY RESPONSE

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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)

I. Introduction

The Board should deny institution of *inter partes* review ("IPR") of U.S. Patent No. 10,237,773 ("the '773 Patent") for two independent reasons.

First, the Petition should be denied on the merits. The sole independent challenged claim (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 Petition contends that management of an action constitutes the alleged "service usage control policy," but fails to explain how managing an action constitutes selection of a policy (contrary to the plain meaning of that term).

Claim 1 further recites "determin[ing] respective deferred time slots for each of the background network service usage activities ***based on***"[1] 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 prior art's "management of an action"). The Petition instead contends that these deferred timeslots are based on "*connectivity prerequisites and network busy state*" (Pet. at 35), which are not even alleged to be the claimed "service usage control policy." Accordingly, the Petition fails to set forth a reasonable likelihood of prevailing on the merits.

[1] All emphases herein are added unless otherwise specified.

Second, the Board should exercise its discretion and deny institution under 35 U.S.C. § 325(d) because the USPTO has already considered the same or substantially the same prior art as that presented in the Petition, and the Petition has failed to show that the Examiner materially erred during prosecution.

Ground 1A relies only on the Cole reference, and as the Petition admits, a family member with nearly identical disclosures as Cole was considered by the Examiner during original prosecution. Ground 1B, the only other ground challenging the sole independent claim of the '773 Patent, again relies on Cole as its lead reference and a secondary reference D'Amore; the D'Amore disclosures on which the Petition relies are likewise cumulative of and substantially the same as art the Examiner considered during prosecution.

The Petition's reliance on the Rao, D'Amore, and Aleksic references for certain aspects of the dependent claims does not justify institution of review. Grounds 1B-1F all rely on either Cole or the Cole-D'Amore combination to meet the elements of the sole independent claim, and thus are cumulative for the same reasons. And in any event, as the Petition admits, a nearly identical family member of Rao was also considered by the Examiner during prosecution.

The Board should deny institution of the Petition.

II. Overview of the '773 Patent

At a high level, the '773 Patent is generally direct 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, [to] select a corresponding current service usage control policy for the background network service usage activities"; and to "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 at claim 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

[1.4] 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.

Id. 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 and then later applied to make decisions regarding how certain activities should be deferred.

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 '773 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)." *Id.* 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. In other words, 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.

Thus, 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.* 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").

The understanding that a "policy" is first selected, and then later applied to

make specific traffic control decisions, is confirmed by the specification's discussion of other embodiments. 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"). *Id.* 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 to 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.

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 "select[ing] a corresponding current service usage control policy" "based at least in part on a current WWAN network busy state," and then

"determin[ing] respective deferred time slots for [activities] ***based on*** the current service usage control policy." *Id.* at claim 1.

III. Level of Ordinary Skill in the Art

The Petition proposes that a POSITA in the field of the '773 Patent "would have has (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 (internal citation omitted). For purposes of this preliminary response, Patent Owner does not challenge that definition.

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

The Petition maps Cole's "management of actions" to 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." *See, e.g.*, *id.* at 31. In other words, the Petition contends that a decision to manage an action is the alleged "service usage control policy." However, as explained below, the Petition's theory relies on an unsupported redefinition of the plain meaning of "policy."

Furthermore, even if the Petition's identified management of an action ***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*" (*id.* at 35), which are not even alleged 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, institution should be denied.

A. The Petition fails to identify a "network service usage control policy" under the plain meaning of that term.

Claim limitation [1.5] of the '773 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 id.* at iv; Ex. 1001 at 107:46-49.

The Petition relies solely on Cole for this limitation. *See* Pet. at 29-33 (only prior art citations to Cole, Ex. 1005). Specifically, the Petition alleges that "Cole's management of actions" (such as automatically postponing an action) constitutes the claimed "service usage control polic[ies]." *See id.* 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' ….") (citing Ex. 1005 ¶¶[0073],

[0075]) (underlining added, bold italics in original, other emphases removed); *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'").") (quoting Ex. 1005 ¶[0085]) (underlining added, bold italics in original, other emphases removed); *id.* ("The management of actions in Cole is consistent with the '773 patent's description of a '***service usage control policy***' ….") (citing Ex. 1001 at 12:20-23) (underlining added, bold italics in original).

The Petition, however, provides no explanation as to how "management of actions" constitutes the plain meaning of a "service usage control policy." *See generally id.* at 29-33. Nor could it have done so, because the plain meaning of a "policy" is a set of rules that is ***used*** to make decisions about how to manage actions. For example, the '773 Patent repeatedly explains that a given service usage control policy is ***applied*** or ***implemented*** to manage actions. *See supra* § II (citing Ex. 1001 at 12:20-23, 12:43-57, 13:33-37, 56:56-57:6). 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 to defer network activity), and that the managing of an activity is not ***itself*** the policy but is rather ***based on*** a policy. *See* Ex. 1001 at 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*").

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 Authoritative Dictionary of IEEE Standards Terms 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.* In other words, the policy defines when certain actions will be taken, and those actions are taken as a result of applying the policy, consistent with the discussion of the ’773 Patent.

In contrast to the above, the Petition’s identified “management of actions” in Cole is not a “policy,” but is at most the ***application*** of a policy. And whatever policy is used to make decisions about Cole’s management of actions, that policy is not alleged to be selected “*based at least in part on a current WWAN network busy state*” as required by claim 1. The Petition entirely skips the claim requirement that the policy must be ***selected*** based on a network busy state, and instead alleges that actions are taken (i.e., a policy is ***applied***) based on a network busy state.

The Petition never explains why the plain meaning of ***selecting a policy*** from a set of policies should be expanded to encompass ***applying*** a single policy to manage actions. Instead, the Petition seems to take the view that the ’773 Patent

itself redefines the plain meaning of selecting a policy to encompass managing actions. *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 at 12:20-23) (emphasis in original). But the cited portion of the '773 Patent makes clear that managing 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 at 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 deferral of activities is the "control of network service usage activities," not the 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.

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, but provides no evidence that any such policy is selected on the basis of a network busy state.

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 (among other things) meet the following two distinct requirements. **First**, the policy must be selected "based at least in part on a current WWAN network busy state." *See* Ex. 1001 at claim 1 ("instructions that … cause the processor to … ***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"). **Second**, the policy must be used to determine "respective deferred time slots for each of the network service usage activities." *Id.* ("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 entirely on Cole for both of these requirements. *See generally* Pet. at 29-35.

Regarding the first requirement, the Petition alleges that the "network service usage activity" is selected "based at least in part on a current WWAN network busy state" because "'[w]hen the monitored load exceeds a predetermined threshold,' the connection manager 'may take one of several actions to manage the load,'" such as "'postpon[ing] the actions automatically.'" *Id.* at 30 (quoting Ex. 1005 ¶¶[0075], [0085]). In other words, under the Petition's theory, the "policy" that is selected is

alleged to be "one of several actions" that is taken to manage a network load.[2]

Regarding the second requirement, the Petition alleges that 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." *Id.* at 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 "connectivity prerequisites and network busy state" are ***not even alleged to be*** "the current service usage control policy"—rather, as the Petition makes clear, under its theory, the "service usage control policy" is simply a decision to manage a particular action, e.g., by deferring that action until a later time. *See, e.g.*, *id.* 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' ….") (citing Ex. 1005 ¶¶[0073], [0075]) (underlining added, bold italics in original, other emphases removed); *id.* at 30 ("Cole describes that, '[f]or certain background tasks, the connection manager …

[2] As explained in Section IV.A above, that theory fails because management of an action is not a selection of a policy.

may postpone the actions automatically' ('***select a current corresponding service usage control policy***' for the 'background network service usage activities.').") (quoting Ex. 1005 ¶[0085]) (underlining added, bold italics in original, other emphases removed); *id.* ("The management of actions in Cole is consistent with the '773 patent's description of a '***service usage control policy***' ….") (citing Ex. 1001 at12:20-23) (underlining added, bold italics in original).

Dispositively, the claims do not recite that the respective deferred time slots are "based on a current WWAN network busy state" (which is how the Petition applies the claims). Instead, the claims require that the "***service usage control policy***" is selected based on that busy state, and that the deferred time slots are determined based on the selected "service usage control policy." *See* Ex. 1001 at claim 1. 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., Cole's "management of actions").

Accordingly, even if Cole's "management of actions" ***could be*** the claimed "service usage control policy" (as explained in Section IV.A, it cannot), the Petition has failed to set forth any theory regarding how "respective deferred time slots" would be "determine[d]" "***based on***" that policy.

In sum, the Petition does not 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. at 35), which are never alleged to be a "service usage control policy." Accordingly, the Petition cannot show that its combination discloses limitation [1.6].

V. The Board should exercise its discretion under 35 U.S.C. § 325(d) to deny institution.

The Board "may take into account whether, and reject the Petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office." 35 U.S.C. § 325(d). As the Board explained in *Advanced Bionics, LLC v. Med-El Elektromedizinische Gerate GmbH* ("*Advanced Bionics*"):

> [U]nder § 325(d), the Board uses the following two-part framework: (1) whether the same or substantially similar art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of the first part of the framework is satisfied, whether the Petition has demonstrated that the Office erred in a manner material to the patentability of the challenged claims. If a condition in the first part of the framework is satisfied and the Petition fails to make a showing of material error, the Director generally will exercise discretion not to institute inter partes review.

IPR2019-01469, Paper No. 6 at 8-9 (PTAB Feb. 13, 2020) (precedential) (footnote omitted). "If reasonable minds can disagree regarding the purported treatment of the

art or arguments, it cannot be said that the Office erred in a manner material to patentability. At bottom, this framework reflects a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown." *Id.* at 9.

"In evaluating whether to exercise our discretion when the same or substantially the same prior art or arguments previously were presented to the Office under section 325(d), we have weighed some common *non-exclusive* factors:

(a) the similarities and material differences between the asserted art and the prior art involved during examination;

(b) the cumulative nature of the asserted art and the prior art evaluated during examination;

(c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;

(d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relied on the prior art or Patent Owner distinguishes the prior art;

(e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and

(f) the extent to which additional evidence and facts presented in the petition warrant reconsideration of the prior art or arguments."

Becton, Dickinson & Co. v. B. Braun Melsungen AG, IPR2017-01586, Paper No. 8

at 17-18 (§ III.C.5) (PTAB Dec. 15, 2017) (informative, precedential as to § III.C.5) (italics in original). "If, after review of factors (a), (b), and (d), it is determined that the same or substantially the same art of arguments previously were presented to the Office, then factors (c), (e), and (f) relate to whether the petitioner has demonstrated a material error by the Office." *Advanced Bionics* at 10.

A. *Advanced Bionics* Step 1 (*Becton, Dickinson* Factors (a), (b), and (d)): The same or substantially the same prior art was previously presented to the USPTO.

The Petition contains six alleged grounds of invalidity: (1) an obviousness ground based on Cole (Ground 1A, for claims 1, 5-8, 10, 13, 14, and 20); (2) an obviousness ground based on Cole and D' Amore (Ground 1B, for claims 1-8, 10, 13-15, and 20); (3)/(4) obviousness grounds based on Cole and Rao (Ground 1C) and Cole, D'Amore, and Rao (Ground 1D), both only for dependent claims 9, 11, 12, 16, 18, and 19; and (5)/(6) obviousness grounds based on Aleksic (Ground 1E) and D'Amore and Aleksic (Ground 1F), both only for dependent claim 17. *See* Pet. at 1-2. As claim 1 is the sole independent claim of the '773 Patent (*see* Ex. 1001 at 107:33-110:19), only Grounds 1A and 1B challenge any independent claims.

1. For Ground 1A, Cole is cumulative of and substantially the same as a nearly identical family member considered by the Examiner during prosecution.

The Petition admits that a family member of its lead reference Cole, and the only references it relies upon in Ground 1A, was cited during prosecution. Pet. at 84

("[A] family member of Cole (U.S. 2008/0080457 ('Cole-2') was cited on an IDS by the applicant.") (citing Ex. 1002 at 179, 462); *see also* Ex. 1001 at 11 (listing Cole-2 in the "References Cited" section). A comparison of Cole (Ex. 1005) and Cole-2 (Ex. 2001) reveals very few and only minor differences in the text of the two documents—only the Abstract and three out of 155 paragraphs have any differences at all. *See* Ex. 2002. Cole and Cole-2 also have the same eleven figures. *Compare* Ex. 1005 at Figs. 1-11 *with* Ex. 2001 at Figs. 1-11.

The Petition does not even mention, let alone explain, why any alleged differences between Cole and Cole-2 are relevant here. Rather, the Petition alleges that "there is no evidence that [Cole-2] was substantively considered by the Office" and that "[b]ecause the '773 Patent's prosecution did not involve any discussion between the applicant and the Examiner regarding the teachings of the prior art applied in this Petition, the invalidity challenge based on the prior art asserted in this Petition is not the same as, or substantially similar to, art and arguments previously presented to the Office in connection with the '773 Patent." Pet. at 84-85. In other words, the Petition argues that citation of art on an IDS is insufficient to support denial under Section 325(d).

The Petition cites no authority for this argument, and indeed, this argument is contrary to the precedential *Advanced Bionics* decision and its progeny: "***Previously presented art includes art*** made of record by the examiner, and art provided to the

Office by the applicant, such as ***on an Information Disclosure Statement (IDS)***, in the prosecution history of the challenged patent." *Advanced Bionics* at 8; *see also Ivantis, Inc. v. Sight Sciences, Inc.*, IPR2022-01530, Paper No. 14 at 17 (PTAB Mar. 27, 2023) ("[T]here is no requirement that Examiner needs to rely on a reference in a rejection during prosecution in order for the reference to be 'considered' during prosecution.").

The Petition's argument has been consistently rejected by the Board. *See, e.g.*, *Palo Alto Networks, Inc. v. Centripetal Networks, Inc.*, IPR2021-01156, Paper No. 10 at 13-14 (PTAB Jan. 24, 2022) (rejecting argument that "the first part of the *Advanced Bionics* framework is not met because [the prior art was] not substantively discussed or applied in a rejection during prosecution" because "[u]nder the Board's precedent in *Advanced Bionics*, however, '[p]reviously presented art includes . . . art provided to the Office by an applicant, such as on an [IDS]'") (quoting *Advanced Bionics* at 7-8) (alterations in original); *Eyenovia, Inc. v. Sydnexus*, IPR2022-00963, Paper No. 7 at 10-11 (PTAB Nov. 8, 2022) ("*Eyenovia*") (Because "references appear in the references cited section of the [challenged] patent and were identified in Information Disclosure Statements ('IDSs') during prosecution[,] … these references were 'previously presented' for the purposes of assessing the application of discretion under 35 U.S.C. § 325(d)."); *BMW of N. Am., LLC v. Stragent, LLC*, IPR2021-00419, Paper No. 14 at 12-13 (PTAB July 19, 2021) (exercising discretion

to deny institution under § 325(d) in part because relied-upon prior art was cited on an IDS), *reh'g denied*, Paper No. 21 at 5 (PTAB Mar. 21, 2022); *Vovomart (HK) Enters. Co. v. Office Kick, Inc.*, PGR2022-00048, Paper No. 14 at 9 (PTAB Jan. 12, 2013), *reh'g denied*, Paper No. 16 (PTAB Mar. 9, 2023) (same); *Microsoft Corp. v. AlmondNet, Inc.*, IPR2022-01319, Paper No. 9 at 8, 10 (PTAB Jan. 30, 2023) ("*AlmondNet*") (same), *POP request denied*, Paper No. 13 (Mar. 24, 2023), *reh'g denied*, Paper No. 14 (PTAB Apr. 23, 2023).

Moreover, the prosecution history makes clear that the Examiner considered Cole-2 because the Examiner placed a copy of the IDS containing this reference in the file history, with an electronic signature next to the statement "All references considered except where lined through," with no line through Cole-2. *See* Ex. 1002 at 254; *see also, e.g.*, *Biocon Pharma Ltd. v. Novartis Pharms. Corp.*, IPR2020-01263, Paper No. 12 at 9 (PTAB Feb. 16, 2021) ("[W]e accept that the Examiner considered [the prior art reference] because it is listed on the IDS and the Examiner signed the IDS with the statement 'all references considered except where lined through.'"); *Vital Connect, Inc. v. Bardy Diagnostics, Inc.*, IPR2023-00381, Paper No. 7 at 14 (PTAB July 11, 2023) (Because "Oster was listed in an information disclosure statement (IDS)," "appears on the face of the [challenged patent]," and "[t]he examiner also certified that he considered all references listed in the IDS 'except where lined through,' and Oster is not lined through," "[t]here can be no

dispute that Oster was before the Office."); *see also id.* at 15-16 (holding the same for a family member of a reference asserted in the petition, and finding the reference asserted in the petition cumulative of the family member).

In sum, because Cole-2 was previously presented to the Office, and Cole is cumulative of Cole-2, substantially the same art as Cole has already been presented to the Office.

2. For Ground 1B, the Petition's reliance on D'Amore for limitations [1.6] and 1.7] does not change the Section 325(d) calculus.

D'Amore is the only reference other than Cole that the Petition relies upon in Ground 1B, the Petition's only other challenge to the sole independent claim of the '773 Patent (claim 1). For claim elements [1.pre], [1.1], [1.2], [1.3], [1.4], and [1.5], the Petition relies only on disclosures from Cole, with D'Amore only mentioned for claim elements [1.6] and [1.7]. Pet. at 7-40. This portion of the preliminary response therefore only addresses the cumulative nature of D'Amore's disclosures with respect to claim elements [1.6] and [1.7]. As detailed below, the Petition's cited disclosures from D'Amore are substantially the same as Petition's cited disclosures from Cole. *See Nokia of Am. Corp. v. Soto*, IPR2023-00680, Paper No. 10 at 21-23, 26-28 (PTAB Nov. 3, 2023) (denying institution of review where the petitioner relied on different art than was cited during prosecution, but applied the art in the "same manner" as other art before the Office).

The only portion of claim element [1.6] on which the Petition purports to rely on D'Amore is "a selected subset of the background network service usage activities are deferred until network congestion is no longer indicated." Pet. at 36-37. The Petition first alleges that Cole discloses this sub-limitation, specifically alleging that Cole discloses "determin[ing] if ***certain bandwidth activities***" such as "a background application (e.g., synchronizing files or emails) … ***should be aborted to preserve bandwidth for other applications***," and that Cole's "connection manager 260 ***reschedules the aborted activity at a later time***, presumably when the bandwidth load will be decreased or a better connection will be available." *Id.* at 34 (quoting Ex. 1005 ¶[0080]). The Petition then alleges "D'Amore describes a 'custom configuration database' within a ***'policy management module'*** that ***stores a … priority level relationship*** for a set of predetermined mobile applications,'" and further notes that "D'Amore teaches providing access to applications having higher priority level and ***deferring and removing access from applications having a lower priority***." *Id.* at 36-37. (citing Ex. 1006 at Abstract, ¶¶[0060]-[0061], [0070], [0072]); *see also id.* at 40 (alleging that "D'Amore discloses a control policy in which ***different priority levels (e.g., high or low) are assigned*** to applications (and associated tasks) and ***access by the lower priority application is*** restricted or ***deferred*** when the network is congested"). In other words, the Petition alleges that both Cole and D'Amore describe assigning priority levels to an activity based on the

importance of that activity, and deferring less important activities until network conditions improve.

And for claim element [1.7], the Petition does not cite any additional disclosures from D'Amore that are not already cited in its discussion of claim element [1.6]. *Compare id.* at 40 (citing Ex. 1006 at Abstract, ¶¶[0060], [0061], [0070], [0072]) *with id.* at 36-37 (citing same portions of Ex. 1006). Rather, in its analysis of claim element [1.7], the Petition simply alleges, with citation only to an expert declaration, that "when implementing [D'Amore's] policy in the Cole-D'Amore system, … it would have been obvious to a POSITA that when such time slots are reached for 'each of a background network service usage activities," these low priority activities are then 'allow[ed] … to access the WWAN during the respective deferring time slot for that background network service usage activity.'" *Id.* at 40 (citing Ex. 1003 ¶69); *see also id.* at 39 (similarly alleging "Cole does not make a prohibition of WWAN access during the deferred time").

The Petition's allegations concerning the D'Amore disclosures it cites for claim elements [1.6] and [1.7] are therefore cumulative of and substantially the same as the Petition's allegations concerning the Cole reference.

3. The Petition's reliance on Rao, D'Amore, and Aleksic for certain limitations of certain dependent claims in Grounds 1B-1F does not counsel against denial of institution.

The Board has held that "Petitioners' citation of references not considered by

Examiner solely for 'additional subject matter of certain dependent claims[] is insufficient to persuade us that exercising our discretion under 35 U.S.C. § 325(d) is inappropriate.'" *See, e.g., Miltenyi Biomed. GmbH v. Trs. of Univ. of Pa.*, IPR2022-00853, Paper No. 11 at 45 (PTAB Oct. 11, 2022) ("*Miltenyi*") (quoting *Kayak Software Corp. v. Int'l Bus. Machs. Corp.*, CBM2016-00075, Paper No. 16 at 10 (PTAB Dec. 15, 2016) (informative)) (alteration in original), *reh'g denied*, Paper No. 18 (PTAB Feb. 17, 2023). Therefore, it is of no event whether or not the Petition relies on non-cumulative disclosures from D'Amore, Rao, and Aleksic for its analysis of dependent claims for the simple reason that if the independent claim is valid then so are the dependent claims. *See AlmondNet* at 8, 11 (denying institution under Section 325(d) even though the Narin reference, which was not before the Examiner, was applied by the Petition for certain dependent claims, and noting that patent owner argued that "whether or not Narin discloses certain limitations of [a] dependent claim … would have made no difference to the Examiner's analysis, and it is therefore unnecessary to evaluate the questions of what Narin discloses or whether Narin was of record"). It is therefore unnecessary to evaluate the questions of what Rao, D'Amore, and Aleksic disclose in the context of these dependent claims or whether these references were of record. *See, e.g., Miltenyi* at 45; *AlmondNet* at 8, 11.

However, as the Petition admits, "a family member of Rao (PCT application

WO 2006/012610A2 ('Rao-2') was cited on an IDS by the applicant." Pet. at 84-85 (citing Ex. 1002 at 203); *see also* Ex. 1001 at 13 (listing Rao-2 in the "References Cited" section). And a comparison of Rao (Ex. 1007) and Rao-2 (Ex. 2003) reveals that aside from formatting differences and some additional introductory material in Rao-2, there is no difference between these two family members—Rao-2 contains all of the same disclosures as Rao plus a small amount of additional content. *See* Ex. 2004. Rao and Rao-2 also share the same set of patent figures. *Compare* Ex. 1007 at Figs. 1-6 *with* Ex. 2003 at Figs. 1-6.

In addition, despite "ha[ving] the burden of proof to establish that it is entitled to the relief requested," the Petition does not even mention D'Amore or Aleksic in its discretionary denial section, let alone present any evidence or argument addressing whether D'Amore or Aleksic were before the Examiner, or why D'Amore or Aleksic are not otherwise substantially the same as prior art considered by the Examiner during prosecution. *See* Pet. at 84-85; *EcoFasten Solar, LLC v. Unirac, Inc.*, IPR2021-01379, Paper No. 11 at 38-39 (PTAB Feb. 8, 2022).

* * *

Because the Petition relies only on references for the sole independent claim that have substantially the same relevant disclosures as references presented to the Office and considered by the Examiner, the first part of the *Advanced Bionics* framework is satisfied. *See Advanced Bionics* at 20 ("As discussed above, we

determine that the 'same or substantially the same prior art' was previously presented to the Office. Accordingly, the first condition of the first part of the framework is satisfied, and we need not reach whether the 'same or substantially the same arguments' previously were presented to the Office.").

B. *Advanced Bionics* Step 2 (*Becton, Dickinson* Factors (c), (e), and (f)): Petitioner has made no showing of material Examiner error.

Although the Petition admits that a family member of Cole (and Rao) were before the Examiner during prosecution, and does not identify any material differences between the family members and the references on which it relies, the Petition fails to make any non-conclusory allegations concerning Examiner material error. *See* Pet. at 84-85.

The Petition simply alleges in conclusory fashion that "the Examiner's failure to consider obviousness of the Challenged Claims over the uncited references asserted in this Petition constitutes material error." *Id.* at 85. "Petitioner's argument that the Examiner erred simply by not considered [uncited references] is not persuasive because, under the first part of the *Advanced Bionics* framework, discretionary denial under § 325(d) may be based on presentation of art that is substantially the same as that previously presented to the Office, and is not limited to the same art previously presented." *Microsoft Corp. v. ThroughPuter, Inc.*, IPR2022-00757, Paper No. 10 at 21 (PTAB Nov. 1, 2022). "Although there was no rejection issued over the particular references cited in the Petition, these references

were either before the Examiner … or are cumulative of references … before the Examiner. There is no evidence that suggests the Examiner overlooked the most pertinent teachings in the art presented during prosecution." *Eyenovia* at 19 (denying institution in part because the petition failed to demonstrate that the Examiner materially erred); *see also Gator Bio, Inc. v. Sartorius Bioanalytical Instruments, Inc.*, IPR2023-00215, Paper No. 19 at 21 (PTAB June 20, 2023).

Finally, although not necessary for the Board to exercise its discretion and deny institution under Section 325(d), the Examiner did not err. As explained in Section IV, the Petition fails to identify any "service usage control policy" that is selected based on a network busy state, or even contend that the alleged "service usage control policy" is used to "determine respective deferred time slots" as required by all challenged claims. The weak merits of the Petition, which relies on the same or substantially the same art as was before the Examiner, is a further indication of lack of Examiner error, let alone material error.

* * *

Because the Petition presents only the same and substantially the same prior art as previously presented during prosecution, and because the Petition fails to meets its burden of showing of material error by the USPTO, Patent Owner respectfully requests that the Board exercise its discretion and deny institution under 35 U.S.C. § 325(d). *See Advanced Bionics* at 9 ("If a condition in the first part of the

framework is satisfied and the petitioner fails to make a showing of material error, the Director generally will exercise discretion not to institute *inter partes* review.").

VI. CONCLUSION

Patent Owner respectfully requests that the Board deny institution for either or both of two independent reasons. First, each of the Petition's grounds fails on the merits. Second, the Board should deny institution because the same or substantially the same prior art was presented to the USPTO during prosecution, and the Petition has failed to show any material error by the Examiner.

Date: November 15, 2023

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CERTIFICATION REGARDING WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), Patent Owner certifies that there are 6,592 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 November 15, 2023, 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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