UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
Petitioner,

v.

HEADWATER RESEARCH LLC,
Patent Owner.

IPR2024-01397
Patent 9,647,918 B2

PATENT OWNER'S PRELIMINARY SUR-REPLY

As explained below, Petitioner's analysis ignores critical claim requirements.

I. Petitioner's Preliminary Reply doesn't dispute that the network stack API is not "callable" by applications under the Petition's theory.

Petitioner's Preliminary Reply completely ignores the fact that representative claim 1 requires that the API be "callable" by an application. *See generally* Paper No. 9 ("Prelim. Reply") at 1-5 (no mention of "callable" limitations); Ex. 1001 at 124:35-36, 124:41-43 ("the [first/second] network stack API callable by each of the plurality of device applications"); *see also* Paper No. 7 ("POPR) at 21 (explaining that "the claim also requires that a network stack API is itself callable by applications"); *id.* at 20 ("[T]he Petition does not even ***allege*** any disclosure constitutes lexicography that could require a deviation from the plain and ordinary meaning of the claim scope, which is that the first API must be ***callable*** by the application."); *id.* at 21 & n.6 (explaining that the Petition fails to show the first or second API's' being "callable by each of the plurality of device applications").

The Preliminary Reply's failure to address this claim requirement is not surprising, given that the Petition itself concedes that the application cannot "directly call the 'first' API." Pet. 32. And as already explained by Patent Owner, the Petition's allegation that "*indirectly* calling APIs is depicted in the '918 patent" (Pet. 32) was entirely unsupported. POPR, 1. Even in reply, Petitioner does not dispute that the embodiments the Petition purports to rely upon as disclosing "applications indirectly calling APIs" "are ***not*** described as calls in the '918 patent." POPR, 1.

Other than the incorrect assertion that the '918 patent describes calling a proxy API (which proxy calls a network stack API) as an "indirect call" to the network stack API, Petitioner presents no rationale why the call *to the proxy API* constitutes a call *to the network stack API*. And as already explained by Patent Owner's expert, a POSITA would understand that if an application merely "calls a[n] API which in turn causes a[] component to call the network stack API," then "the application does ***not*** call the network stack API." Ex. 2001 ¶32.

Petitioner's allegation that a call to a ***proxy*** API constitutes a call to the ***network stack API*** is also inconsistent with common sense and the plain meaning of what constitutes a "call" to a particular entity (or for an interface to be "callable"). By way of example, if a customer of a concierge service places a call to a concierge requesting a restaurant reservation, that constitutes the customer's call to the concierge. The concierge may then call the restaurant requesting the reservation, but the *customer* did not "call the restaurant."

More analogous to the claim language, in the above example, a restaurant may have a phone line (a type of "interface") that is publicly accessible, such that it is "callable" by the customer (even if the customer does not *actually* call that number). But consider a restaurant that has a private line that is only available to a select few, including the concierge. Even if the customer *requests* that the concierge call the restaurant's private line (and the concierge does so), that does not make the private

line "*callable*" by the customer. At the risk of stating the obvious, the private line is only *callable* by those who are able to call the line.

The Petition's implication that a network stack API is "callable" even to components that cannot call that API is inconsistent with the plain meaning of "callable." *See* Ex. 2001, ¶32. And Petitioner's attempt to reframe a call to a proxy that in turn calls the network stack API as "indirectly calling"[1] the network stack API is unsupported—no intrinsic or extrinsic evidence supports the idea that a POSITA would have understood such a scenario to be ***any*** type of "call" from the application to the network stack API.

Indeed, the evidence relied on by the Preliminary Reply contemplates an intermediary scenario, yet does ***not*** describe the call as being made ***by*** the application, but instead being as a "call made ***on behalf of*** the app" (just as a *concierge's* call on behalf of a customer is not a *customer's* call to a restaurant). Ex. 1001, 120:42-45 (quoted by Prelim Reply, 3).[2] The same embodiment makes clear that "the proxy" (rather than the "app" that called the "proxy") makes a "socket call."

[1] The concept of an "indirect call" appears to have been invented by Petitioner, as it is not supported by any documentary evidence.

[2] FIG. 36 discusses an application calling a "control application" which then calls the network stack on behalf of the app. The patent makes clear that the network stack is still call***able*** by the app because the use of the intermediary is "optional." Ex. 1001, 120:42-56; *see also id.* 107:27-29; *id.* at FIG. 32 (showing an optional "control application" path and an optional "proxy" path). In contrast, in Bennett, the user application ***cannot*** call the SA API 210 such that it is not "callable."

Id. at 120:30-36 ("the app called the proxy" and "the proxy called the socket").

II. The Preliminary Reply also fails to address the claim requirement that the network stack API call be "accessible" to an application.

Representative claim 1 requires "a first network stack [API], containing at least one first ***call*** accessible to each of a plurality of device applications." Ex. 1001, 124:33-35. The Preliminary Reply is further deficient because it fails to even allege that any network stack API ***call*** is "accessible to" an application under its prior art theory. Instead, Petitioner repeatedly alleges that in the prior art, the network stack ***API*** (rather than a ***call of*** that API) is "accessible to" an application.

The Preliminary Reply's rewriting of the claim language to recite an "API" accessible to applications (rather than a ***call*** of the API being accessible to applications) cannot be a mere oversight, because Patent Owner already explained in detail that the representative claim requires a ***call*** accessible to applications, and that the Petition's theory failed to satisfy that requirement. POPR, 9-13.

Indeed, the POPR explained at length that the only elements in the prior art alleged to constitute a "first call accessible to" an application is Bennett's "SA API 210" "requests," and that the "Petition makes no attempt to explain how these ***requests***… are 'accessible to' user application 150." POPR, 9-13; Ex. 2001, ¶¶42-43. Even after faced with this deficiency, Petitioner again fails to explain how Bennett's "SA API 210" ***requests*** (i.e., the alleged "first call accessible to each of a plurality of device applications") are, in fact, "accessible to" any device application.

As explained by Patent Owner's expert, "in order for an API request to be 'accessible' to an application, the application must be able to actually make the API request." Ex. 2001, ¶73. The Petition, Petitioner's expert, and Petitioner's Preliminary Reply do not dispute this expert testimony; instead, Petitioner merely addresses the phantom claim requirement that the ***API*** be "accessible" to applications (rather than the claim language, which requires that the API contain a ***call*** that is accessible to applications).

Patent Owner can only begin to speculate why Petitioner failed to address the actual claim language, even ***after*** being put on notice by Patent Owner that the Petition failed to adequately address it. But whatever the reason, Petitioner's failure is fatal to the Petition, because it is the Petition's burden to explain "where each element of the claim is found in the prior art" (37 C.F.R. §42.104(b)(4)), and Petitioner (even with the benefit of a preliminary reply) has failed to do so.

Petitioner additionally argues that Petitioner's claim interpretation does not render claim language superfluous. Even assuming Petitioner is correct that the claim language is not *entirely* superfluous under Petitioner's claim interpretation, the fact remains that Petitioner has failed to meaningfully address either of two claim requirements: that the network stack API contain a "call accessible to" applications, and that the API be "callable" by applications. Accordingly, Petitioner cannot establish a reasonable likelihood of prevailing, and institution should be denied.

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Respectfully submitted,

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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 February 13, 2025, 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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