

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 IPR2024-01396
Patent 9,647,918 B2

PETITIONER'S REPLY TO
PATENT OWNER'S PRELIMINARY RESPONSE

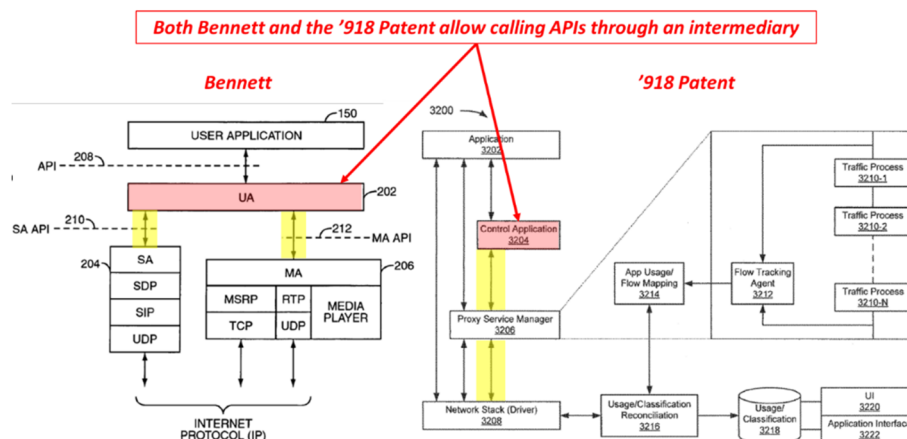
The POPR argues that Bennett’s APIs are not “accessible” to Bennett’s applications because the applications call the APIs through an intermediary (e.g., user agent (UA) 202), rather than “directly.” POPR, 12-19. In essence, the POPR requires the term “accessible” to be read as “*directly* accessible.” But the claims do not recite the term “directly” and the POPR’s reading is inconsistent with the plain and ordinary meaning, which includes both “direct” and “indirect” accessibility.

The POPR appears to acknowledge the notion of “direct” and “indirect” accessibility in its discussion of application access to the network stack in the ’918 Patent. Specifically, the POPR explains how the application can “interface[] *directly* with the network stack” or can “ma[ke] use of the network stack *indirectly* by ... prompt[ing] the proxy media service manager to interface with the network stack on the application’s behalf.” POPR, 5 (emphasis in original). In this context, the POPR recognizes that the application can “indirectly” access the network stack through an intermediary—the proxy—that acts on the application’s behalf.

Yet, the POPR contends that the same type of “indirect” access is not permitted for the claimed APIs. But no claim language excludes “indirect” access. And nothing in the specification or prosecution history of the ’918 Patent rises to the level of lexicography or disclaimer necessary to read the term “directly” into the claims. As explained in the Petition, the ordinary meaning of “accessible” includes “capable of being used”—whether that use is direct or indirect. Petition,

32-35. Indeed, just as the '918 Patent's applications are capable of using the network stack *indirectly* through a proxy acting on the applications' behalf, Bennett's applications are capable of using Bennett's APIs *indirectly* through the UA 202 acting on the applications' behalf. SAMSUNG-1041, [0025] ("translates application commands"), [0034], [0045] ("responsive to a CALL request"), [0051].

The '918 Patent also describes examples of "indirect" access that align closely with Bennett's disclosure. The POPR contends that FIG. 32 shows a "dual-path approach." POPR, 5-6. That characterization, however, conveniently ignores the *third* path between application 3202 and network stack 3208. That third path in FIG. 32 depicts application 3202 communicating through a "control application 3204" that is positioned between the application and proxy service manager 3206 (much like Bennett's UA 202). SAMSUNG-1001, FIG. 32, *compare with* Petition 30, 37; SAMSUNG-1041. Certainly, the API of proxy 3206 is not inaccessible to application 3202 simply because it uses the API through control application 3204.



SAMSUNG-1041, FIG. 3 vs SAMSUNG-1001, FIG. 32

If the POPR is correct and the claims are limited to “direct” API access, the control application embodiment of FIG. 32 would be impermissibly read out of the scope of the claims. The ’918 Patent also includes other control application embodiments that confirm indirect access is permissible. *See* SAMSUNG-1001, FIGs. 28-29. In these embodiments, the “control application 2816 ... invokes the proxy 2818 *on behalf of* the initiator 2814.” *Id.*, 107:29-32, 60-62 (“An initiator ... triggers a control application ... to utilize a proxy.”). The ’918 Patent further contemplates a “socket-*to*-control app-*to*-initiating app” mapping, confirming that the presence of an intermediary control application does not impact the initiating application from accessing and using the socket. *Id.*, 109:47-49. In fact, the ’918 Patent explains that “an initiator could at least in theory have *any number of intervening apps* between the initiator and the proxy.” *Id.*, 109:26-29. The POPR’s contention that *no* intervening applications are allowed directly contradicts the ’918 Patent’s disclosure that *any number* of intervening applications are allowed.

Further, the only portion of the specification that explicitly references “an API call” relates to FIG. 36. *Id.*, 120:7-56. Like the embodiments above, FIG. 36 includes an intermediary that provides access to an API on an application’s behalf. FIG. 36 includes an “activity manager 3612” that tags application traffic flow at a third point that “corresponds to *a control application call made on behalf of the app.*” *Id.*, 120:42-45. As this disclosure confirms, the ’918 Patent contemplates an

intervening application making an API call “on behalf of” the application, confirming that the application indirectly accesses and calls the API. Indeed, “the activity manager 3612 pushes the app up one more level, such that the data flow is from *the app to a control application and to the proxy*.” *Id.*, 120:45-52.

Like the '918 Patent, the prior art uses “accessible” broadly. SAMSUNG-1042, [0013] (apps communicate with other apps that are “accessible via a network”); SAMSUNG-1043, 2:35-40 (remote servers are “accessible” to content publishers); SAMSUNG-1054, 20:58-21:3 (operating system calls gather “network accessible information”). These examples illustrate the ordinary meaning of “accessible” as including both “direct” and “indirect” accessibility. *Id.* In comparison, the POPR and Mr. de la Iglesia do not offer any extrinsic evidence to support a narrow interpretation of “accessible.” POPR, 12-19; EX-2001, ¶¶43-58.

Finally, the POPR incorrectly argues that allowing indirect access renders claim language superfluous. With respect to FIGs. 30 and 35,¹ the POPR argues that the proxy API calling the network stack API is “what the claim contemplates” when it recites “interfac[ing] with the network stack.” POPR, 17. But that is not what the claim says. Limitation 1.5 requires the media service manager to

¹ The POPR does not even contend with the showing in FIGs. 12-13 of applications accessing APIs through intermediary layers, instead contending that these are not “embodiments of claim 1” without appreciating how FIGs. 12-13 still inform how indirect access to APIs is permissible.

“*interface* with the *network stack*,” not call the network stack API, as the POPR assumes. Petition, 41-42. Thus, even if the POPR’s interpretation of the Petition is correct (it is not), the claims still differentiate between the media service manager interfacing with the network stack using a network stack API versus interfacing with the network stack using different techniques.

Regardless, and to be clear, the Petition’s mapping to Bennett (*see* Fig. 3 above) requires two, separate APIs that are each accessible by user application 150. Nothing about this interpretation renders any claim language superfluous. In fact, the POPR’s characterization of the Petition’s arguments as alleging that the “application [] can only call the proxy API” is simply wrong. POPR, 17-18. Nowhere did the Petition make such an argument. Petition, 29-38. The Petition simply argued that both of Bennett’s APIs (signaling agent API 210 and media agent API 212) are “accessible” to application 150 through Bennett’s UA 202. *Id.*

Because Bennett accesses APIs through UA 202 similarly to how the ’918 Patent accesses APIs through its control application, Bennett’s APIs are accessible to its applications. Bennett’s applications even directly use APIs to send separate API calls directed to the network stack and media agent. SAMSUNG-1041, [0059] (“user application 150 ... sends a REGISTER request to the UA 202 (a) using the API shown in Table 1” and “UA 202 forwards the REGISTER request to the SA”), [0061], [0068]. Nothing about these mappings renders claim language superfluous.

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e), the undersigned certifies that on February 6, 2025, a complete and entire copy of this Petitioner's Reply to Patent Owner's Preliminary Response was provided by email, to the Patent Owner, by serving the correspondence addresses of record as follows:

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