Trials@uspto.gov
571-272-7822

Paper 10
Date: June 26, 2024

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
Petitioner,

v.

HEADWATER RESEARCH LLC,
Patent Owner.

IPR2023-01361
Patent 9,271,184 B2

Before ROBERT J. WEINSCHENK, GARTH D. BAER, and RUSSELL E. CASS, *Administrative Patent Judges*.

WEINSCHENK, *Administrative Patent Judge*.

DECISION
Denying Petitioner's Request on Rehearing of
Decision Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.71(d)

I. INTRODUCTION

Samsung Electronics Co., Ltd. ("Petitioner") filed a Request for Rehearing (Paper 9, "Req. Reh'g") of the Decision Denying Institution of *Inter Partes* Review (Paper 8, "Decision" or "Dec.") of claims 1–6 and 10–20 of U.S. Patent No. 9,271,184 B2 (Ex. 1001, "the '184 patent"). For the reasons set forth below, the Request for Rehearing is *denied*.

II. ANALYSIS

When considering a request for rehearing of a decision whether to institute an *inter partes* review, the Board reviews its decision for an abuse of discretion. 37 C.F.R. § 42.71(c). The party requesting rehearing bears the burden of showing that the decision should be modified, and "[t]he request must specifically identify all matters the party believes the Board misapprehended or overlooked." 37 C.F.R. § 42.71(d).

Claim 1 recites "one or more processors are operable to, in a first state wherein the particular application is one of the first one or more applications, and the particular application is not classified as interacting with a user in the device user interface foreground, *block the Internet service access request*." Ex. 1001, 106:10–15 (emphasis added). In the Decision, we stated that "the '184 patent distinguishes between 1) blocking an Internet service access request before a connection is open; and 2) blocking a network stream after a connection is open." Dec. 7–8. We also stated that Petitioner did not show sufficiently that Rao's network packets include an Internet service access request such that discarding the network packets also discards an Internet service access request. *Id.* at 8–9.

Petitioner argues that "the Decision relies on an improperly narrow interpretation . . . that requires a request be blocked 'before a connection [to

the Internet] is open'" and "conflates the claimed access to an 'Internet service' with a connection to the Internet." Req. Reh'g 1 (citing Dec. 7–8). We disagree. The phrase "to the Internet" does not appear in the quoted portion of the Decision.[1] Dec. 8. Petitioner added that phrase in its Request for Rehearing. *Compare id.*, *with* Req. Reh'g 1. The cited portion of the Decision states "blocking an *Internet service* access request before a connection is open." Dec. 8 (emphasis added). Thus, the Decision refers to blocking an access request before a connection to an *Internet service* is open.

Petitioner argues that "the Decision conflates disclosure related to requests for '**network** access' . . . with disclosure related to requests for '**Internet service** access,'" which "are **not** the same." Req. Reh'g 6 (citing Dec. 7–8). On this record, Petitioner's argument is unavailing. The '184 patent describes techniques for controlling "network *service* usage," which include blocking a network access request. Ex. 1001, 91:25–30, 91:41–49 (emphasis added). And the '184 patent indicates that an example of a

[1] The Decision relies on a portion of the Petition that discusses an application's "access [to] the Internet." Dec. 9 ("[i]f an application is permitted to access the Internet"). We understood that portion of the Petition as referring to an application's access to a service via the Internet. *Id.* ("after an application's Internet service access request is permitted"). Even if we were incorrect, we only relied on that portion of the Petition as an "addition[al]" reason for our determination. *Id.* For the other reasons set forth in the Decision, Petitioner does not provide sufficient evidence to support its assertion that Rao's network packets embody an Internet service access request. *See, e.g.*, *id.* ("Petitioner does not explain specifically why a person of ordinary skill in the art would have known or found it obvious that Rao's network packets embody or otherwise include an Internet service access request.")

network access request is an Internet service access request.[2] *Id.* at 11:27–32 ("network access requests (e.g., IP address requests)"). Thus, the '184 patent's description of blocking a network access request is relevant to blocking an Internet service access request.

Petitioner argues that "the '184 patent contemplates an 'Internet service' broadly encompassing a wide variety of services offered over the Internet, and where at least some of these 'Internet services' do not provide access to the Internet itself and would only be available for access after an Internet connection is open." Req. Reh'g 7–8 (citing Ex. 1001, 39:4–39, Figs. 2, 3). On this record, Petitioner's argument is unavailing. The portion of the '184 patent cited by Petitioner simply states that a device can access various Internet services via the Internet. Ex. 1001, 39:24–30. The cited portion does not describe blocking an Internet service access request. *See id.* at 39:4–39, Figs. 2, 3. And, as explained in the Decision, other portions of the '184 patent describe blocking an access request before a connection to an Internet service is open. Dec. 7–8 (citing Ex. 1001, 11:27–32, 91:41–49).

Petitioner argues that "the '184 patent discloses that 'service usage measures' include 'access requests,' which demonstrates that 'access requests' can occur simply by using a service, and not solely by requesting to establish a connection with a service." Req. Reh'g 8 n.2 (citing Ex. 1001, 81:13–23). On this record, Petitioner's argument is unavailing. The portion of the '184 patent cited by Petitioner indicates that "service usage measures"

[2] Petitioner does not dispute that an IP address request is an Internet service access request. *See* Req. Reh'g 13 ("the Decision finds that blocking an 'IP address request' is one form of blocking an 'Internet service access request'").

can include "access requests." Ex. 1001, 81:13–23. But the cited portion does not state that an Internet service access request occurs while using an Internet service. *See id.* Further, the '184 patent's mention of multiple access requests does not demonstrate that an access request occurs after a connection to an Internet service is open. For example, an application may request access multiple times before a connection to the Internet service is open. *See, e.g.*, *id.* at 106:39–43 ("delay network activity in association with the first Internet service access request until a second Internet access request is received and allowed").

Petitioner argues that "in view of the disclosure of the '184 patent, the common meaning of blocking 'access' does ***not*** require that the blocked request be the very first request to access that service (i.e., the '***initial*** access')." Req. Reh'g 8. According to Petitioner, "the blocked request could be an interim access request generated after initial access was already granted, thereby blocking '***further*** access' to the Internet service." *Id.* On this record, Petitioner's argument is unavailing. Petitioner does not identify any portion of the '184 patent that describes blocking an interim Internet service access request for further access. *See id.* at 7–9. Rather, the portions of the '184 patent that mention blocking an access request describes doing so before a connection to an Internet service is open. Ex. 1001, 11:27–32, 91:25–30, 91:41–49.

Petitioner argues that "[a]ccording to claim 18, 'block[ing] the Internet service request' includes 'intercepting . . . write requests by the particular application to a network stack.'" Req. Reh'g 10. According to Petitioner, "an application would be unable to transmit a message to 'write' to a socket, prior to the system creating and connecting to that socket." *Id.*

at 11. Petitioner contends that, as a result, claim 18 "makes clear that 'blocking the Internet service access request' can be performed **after** a socket has been open and connected to (e.g., after a 'socket ()' message and a 'connect ()' message are processed), such as by blocking a data stream that is intended to be transmitted via that socket (e.g., by intercepting messages to write data to the open socket and/or to close the socket)." *Id.*

On this record, Petitioner's argument is unavailing. Claim 18 states that the end-user device intercepts the application's write requests before transmitting them via the network. Ex. 1001, 108:14–18. Because the end-user device does not transmit the write requests via the network, claim 18 does not require that the application has an open connection to an Internet service. *See id.* To the extent Petitioner asserts that an application would not even attempt to transmit a write request before a connection to an Internet service is open, Petitioner does not identify specific evidence of record to support that assertion. *See* Req. Reh'g 10–11.

Petitioner argues that "[c]laim 1 states that its 'one or more processors' are configured to block the Internet service access request 'for a time when data communication for Internet service activities is provided by the WWAN modem.'" Req. Reh'g 11–12 (citing Ex. 1001, code (57), 105:56–58). Petitioner contends that, as a result, "the WWAN modem must already be connected to the Internet," or "data communication for Internet service activities could not be presently provided by it." *Id.* at 12. On this record, Petitioner's argument is unavailing. Claim 1 recites "a wireless wide area network (WWAN) modem to communicate data for Internet service activities between the *device* and at least one WWAN." Ex. 1001, 105:52–58 (emphasis added). Thus, claim 1 indicates that the WWAN

modem provides communication for Internet service activities to the *end-user device*. *Id.* But the portion of claim 1 cited by Petitioner does not indicate that any particular application on the end-user device connects to an Internet service before an Internet service access request is allowed. *See id.*

Petitioner argues that "[c]laim 5 recites, in part, 'when the Internet service access request is blocked in the first state, delay network activity in association with the first Internet access request.'" Req. Reh'g 12. Petitioner contends that "claim 5 is consistent with the ordinary and customary meaning of 'block the Internet service access request,' which does not require that such a 'request' be blocked before a connection to a network is established." *Id.* According to Petitioner, "[b]locking by discarding an application's request to access an Internet service (e.g., email, web site, etc.) would <u>eliminate any network activity</u> associated with that request." *Id.* at 12–13.

On this record, Petitioner's argument is unavailing. Claim 5 recites "when the Internet service access request is blocked in the first state, delay network activity in association with the first Internet access request until a second Internet access request is received and allowed." Ex. 1001, 106:39–43. Thus, claim 5 refers to *delaying* network activity until a second Internet service access request is allowed, and not (as Petitioner argues) *eliminating* network activity. *Id.* This is consistent with the written description of the '184 patent that distinguishes between blocking an Internet service access request and blocking a network stream. *Id.* at 11:27–32, 91:41–54.

Petitioner argues that "the Decision overlooks or misapprehends the '184 patent's disclosure regarding alternative ways of 'blocking' a request to

access an Internet service, at least some of which (i) occur after an Internet connection has already been established and (ii) are analogous to those disclosed in Rao." Req. Reh'g 13. Specifically, Petitioner contends that "the '184 patent specification describes an example system for providing 'differential network access control' with respect to application network traffic, in which (i) an application's network traffic is intercepted by an 'application traffic cache,' and (ii) network traffic is selectively released from the 'application traffic cache' . . . for transmission to the intended destinations." *Id.* at 13–14 (citing Ex. 1001, 101:4–10, 101:63–102:15). On this record, Petitioner's argument is unavailing. The portion of the '184 patent cited by Petitioner does not mention blocking any type of access request. *See* Ex. 1001, 101:63–102:15. Rather, the cited portion describes caching network "traffic." *Id.* And, as discussed above, the '184 patent distinguishes between blocking an Internet service access request and blocking a network stream. *Id.* at 11:27–32, 91:41–54.

Petitioner argues that a person of ordinary skill in the art would have understood or found it obvious that Rao's applications send packetized communications over the Internet that "embody initial access requests to establish connections." Req. Reh'g 14 (citing Pet. 30, 34–37; Ex. 1005 ¶ 94). Petitioner relies specifically on paragraph 94 of Rao as evidence that Rao's network packets include access requests to establish connections. *Id.* But we do not find any citation to paragraph 94 of Rao on the pages of the Petition identified by Petitioner. *See* Pet. 30, 34–37. Thus, Petitioner does not show that we misapprehended or overlooked a matter previously raised in the Petition. *See* 37 C.F.R. § 42.71(d) ("The request must specifically identify . . . the place where each matter was previously addressed in a

motion, an opposition, a reply, or a sur-reply."); *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1369 (Fed. Cir. 2014) ("An argument made for the first time in a motion for reconsideration comes too late and is ordinarily deemed waived.").

Moreover, on this record, Petitioner's argument is unavailing. Rao's paragraph 94 describes a packet that "seeks TCP/UDP/RAW/OTHER connection establishment." Ex. 1005 ¶ 94. But Rao's paragraph 94 does not mention blocking such a packet. *See id.* Further, the portions of Rao cited in the Petition do not teach discarding a packet seeking connection establishment. *See* Pet. 37; Ex. 1005 ¶¶ 104, 191, 194, 207. In fact, to the contrary, Rao teaches that a client may discard network packets during disruption to a previously-established TCP connection between the client and another device. Ex. 1005 ¶ 200 ("a client 105 establishes a session via at least a first protocol over a network connection between the client and another device, such as a peer computing device or gateway"); *id.* ¶ 206 ("the agent 326 keeps the SSL session open or active through the disruption to the TCP connection"); *id.* ¶ 207 ("the remote access client 120 may discard network packets during the disruption"). And Rao indicates that the client does *not* discard a packet seeking to establish a new TCP connection after the network disruption. *Id.* ¶ 208 ("the agent 326 may initiate and establish a new TCP connection").

For the foregoing reasons, after considering Petitioner's arguments in the Request for Rehearing, Petitioner still does not show sufficiently that the Rao, Oestvall, and Freund combination teaches blocking an Internet service access request.

III. CONCLUSION

The Request for Rehearing does not demonstrate that the Decision should be modified.

IV. ORDER

It is hereby

ORDERED that the Request for Rehearing is *denied.*

For PETITIONER:

W. Karl Renner
Jeremy J. Monaldo
Roberto Devoto
FISH & RICHARDSON P.C.
axf-ptab@fr.com
jjm@fr.com
devoto@fr.com

For PATENT OWNER:

Reza Mirzaie
Dale Chang
Amy E. Hayden
James A. Milkey
Neil A. Rubin
Philip X. Wang
RUSS AUGUST & KABAT
rmirzaie@raklaw.com
dchang@raklaw.com
ahayden@raklaw.com
jmilkey@raklaw.com
nrubin@raklaw.com
pwang@raklaw.com