UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMAZON WEB SERVICES, INC.,

Petitioner,

v.

CROGA INNOVATIONS, LTD.,

Patent Owner.

Case IPR2025-00884
U.S. Patent No. 10,601,780

PATENT OWNER'S PRELIMINARY RESPONSE

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Exhibit No.	Description
2001	First Amended Scheduling Order, Dkt. No. 43, *Croga Innovations Ltd. v. Amazon Web Services, Inc.*, No. 1:24-cv-00398-ADA (W.D. Tex. Apr. 16, 2025)
2002	Claim Construction Order, Dkt. No. 50, *Croga Innovations Ltd. v. Amazon Web Services, Inc.*, No. 1:24-cv-00398-ADA (W.D. Tex. June 23, 2025)
2003	Document and transaction history of Reexamination Proceedings concerning U.S. Pat. Appl. Pub. 90/019,638
2004	Defendant's Preliminary Invalidity Contentions (Exhibit A-14), dated Nov. 15, 2024 in *Croga Innovations Ltd. v. Amazon Web Services, Inc.*, No. 1:24-cv-00398-ADA (W.D. Tex.)
2005	Defendant's Opening Claim Construction Brief, Dkt. No. 34, *Croga Innovations Ltd. v. Amazon Web Services, Inc.*, No. 1:24-cv-00398-ADA (W.D. Tex. Feb. 21, 2025)
2006	Defendant's Reply Claim Construction Brief, Dkt. No. 39, *Croga Innovations Ltd. v. Amazon Web Services, Inc.*, No. 1:24-cv-00398-ADA (W.D. Tex. Mar. 28, 2025)

I. INTRODUCTION

Institution should be denied because the Petition fails on the merits. Petitioner asks the Board to treat multiple limitations under an undifferentiated "plain and ordinary meaning," even though in the related W.D. Tex. litigation Petitioner pressed §112, ¶ 6 positions and a need for construction. That about-face matters: if a term is governed by §112, ¶ 6, the Petition had to identify the corresponding structure in the '780 specification, and then map the prior art to *that* structure. *See* 37 C.F.R. §42.104(b)(3) (petition "must" state how each challenged claim is construed and, where §112(f) applies, "identify the specific portions of the specification that describe the structure… corresponding to each claimed function"). Denial is warranted when a petition does not supply that required construction analysis.

On substance, Petitioner's sole ground (Nazario + Ghosh) never shows an **"internal firewall"** that **separates the host system from the virtual system** (claims 1/11). The Petition repeatedly relies on high-level "virtualization provides isolation" theories and expert say-so, but that is not the claimed "internal firewall" separation between host and virtual system in the *computer system*. *See, e.g.*, Pet. at 27-31.

II. CLAIM CONSTRUCTION DEFECTS

Institution should be denied because the Petition fails to comply with 37 C.F.R. § 42.104(b)(3). That rule requires a petition to state how each challenged claim is construed, and, if a term is subject to 35 U.S.C. § 112(f) (formerly § 112, ¶ 6), to identify the specific portions of the specification describing the corresponding structure. Petitioner did neither. Instead, it asserted "plain and ordinary meaning" in this IPR, while in parallel district court litigation it argued the very same terms were means-plus-function limitations governed by § 112, ¶ 6. EX2005 at 11-14; EX2006 at 7-8.

This inconsistency matters. If the terms are governed by § 112, ¶ 6, the prior art must disclose the same function implemented by the specific structure, material, or acts disclosed in the '780 patent specification and equivalents. *See Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347–48 (Fed. Cir. 2015) (en banc). Petitioner never performed that analysis. It mapped the prior art to generic "isolation" concepts untethered to any structure identified in the '780 specification. Pet. 35-36. That is not what § 112, ¶ 6 requires. *See Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d

946, 950–53 (Fed. Cir. 2007) (failure to link claimed function to disclosed structure renders claim indefinite).

As the Board has recognized, the Consolidated Trial Practice Guide "instructs that '[w]here claim language *may* be construed according to 35 U.S.C. § 112(f), a petitioner *must* provide a construction;'" that "a party 'may choose to elaborate why § 112(f) should or should not apply to the limitation at issue;'" and that "'[a] petitioner who chooses not to address construction under § 112(f) risks failing to satisfy the requirement of 37 C.F.R. 42.104(b)(3).'" *10x Genomics, Inc. v. Pres. And Fellows of Harvard Coll.*, IPR2023-01299, Paper 15 at 2, 8 (PTAB Mar. 14, 2024) (emphasis in original); *see Cambridge Mobile Telematics, Inc. v. Sfara, Inc.*, IPR2024-00952, Paper 12 at 21–22 (PTAB Oct. 21, 2024) (informative). Where a petitioner takes contradictory positions in court and at the PTAB, the Board has even greater reason to insist on the § 42.104(b)(3) analysis, because the construction directly affects what the art must disclose.

In *Cambridge Mobile*, the petitioner argued in district court that several claim limitations should be governed by § 112(f).[1] In that case, the petitioner emphasized to the district court the importance of resolving the question of whether these limitations are means-plus-function limitations, contending that the issue "will be most significant to resolution of the case and/or will be case or claim dispositive or substantially conducive to promoting settlement." *Cambridge Mobile Telematics, Inc. v. Sfara, Inc.*, IPR2024-00952, Paper 12 at 7 (PTAB Oct. 21, 2024) (informative). Based on the petitioner's claim construction arguments in district court, the Board determined that "Petitioner has indicated it believes that the claims contain a means-plus-function limitation, thereby implicating 37 C.F.R. § 42.104(b)(3). In the present case however, Petitioner does not address the issue. Rather, Petitioner merely provides a footnote to state its litigation position." *Id.* at 8.

[1] The Board's decision referred to these limitations as "the component terms," which included, for example, terms "mode-determining component. . .," "a first detecting component . . .," and "a second detecting component." *Cambridge Mobile Telematics, Inc. v. Sfara, Inc.*, IPR2024-00952, Paper 12 at 6 (PTAB Oct. 21, 2024) (informative).

Similarly here, Petitioner argued unequivocally in district court that the two "network isolation" terms in claims 1 and 11 of the '780 patent "are means-plus-function terms governed by 35 U.S.C. § 112, ¶ 6." EX2005 at 12.

Term	Amazon's Construction	Croga's Construction
"the device comprises a processor and a memory configured to implement network isolation between one or more untrusted network destinations and the networked computer system" (claim 1) / "implementing network isolation, between one or more untrusted network destinations and the networked computer system, via the at least one device" (claim 11)	Governed by 35 U.S.C. § 112 ¶ 6 Function: "implement network isolation between one or more untrusted network destinations and the networked computer system" (claim 1) / "implementing network isolation, between one or more untrusted network destinations and the networked computer system" (claim 11) Structure: 780 patent at Fig. 1, Fig. 2, 7:7-17, 9:47-65, 9:66-10:4, 11:14-27, 11:33-38, 11:49-57.	No construction necessary or plain and ordinary meaning.

EX2005 at 11-12 (annotated to remove page break).

Petitioner argued that "the claimed devices are mere black boxes that ***fail to connote any structure*** for performing the claimed functions. Thus, their claim scope is ***limited by statute*** 'to only the structure, materials, or acts described in the specification as corresponding to the claimed function or equivalents thereof.'" EX2005 at

12 (citing *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347 (Fed. Cir. 2015) (en banc)) (emphasis added). Petitioner further argued that the claimed "device" is a nonce term, whose function is to "implement network isolation between one or more untrusted network destinations and the networked computer system" and that the '780 specification "makes clear that the claimed 'device' for performing [these functions] can be filter 4, firewall 3, or both." Petitioner argued that "no other structure in the specification is linked to the claimed function." EX2005 at 13-14.

Further, like the petitioner in *Cambridge Mobile*, Petitioner here stressed to the district court the importance of resolving the scope of the relevant claim limitations, arguing that the proposed limits "reflect[] a fundamental principal of our patent system." EX2005 at 12 n.5 (citing *MySpace, Inc. v. GraphOn Corp.*, 672 F.3d 1250, 1256 (Fed. Cir. 2012)). Thus, like in *Cambridge Mobile*, Petitioner here went further than merely taking inconsistent claim construction positions before the Board and a district court.

Moreover, the Federal Circuit has held that disputes over claim scope must be resolved, not brushed aside as "plain meaning." *O2 Micro*

Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1360–61 (Fed. Cir. 2008). Petitioner itself relied on *O2 Micro* in its district court brief, demonstrating its recognition that the scope of these terms is disputed. The Petition's refusal to provide a construction here deprives the Board of the very analysis the rules demand.

Because Petitioner failed to provide the required § 112, ¶ 6 analysis, and because its inconsistent positions confirm there is no agreement on claim scope, the Petition cannot establish a reasonable likelihood of success. Institution should therefore be denied.

III. MERITS DEFECTS INDEPENDENT OF THE CLAIM CONSTRUCTION DEFECTS

Even setting the claim-construction defect aside, Petitioner's Nazario+Ghosh ground fails to show all limitations as claimed, lacks a persuasive motivation-to-combine for the claimed configuration (three discrete firewalls with the particular roles the '780 claims recite), and leans on hindsight/generalities rather than teachings in the prior art.

A. "Internal firewall" that separates host and virtual system (claims 1.c / 11.b)

Independent claim 1 recites "an internal firewall . . . configured to separate the host system from the virtual system in the computer

system." Claim 11 is the only other independent claim, and it similarly recites "separating the host system from the virtual system using an internal firewall executed on the computer system." Petitioner's mapping relies on (i) Nazario's general statements that a virtual machine can contain damage and act as a "logical jail," Pet. 27, and (ii) Ghosh's description of hypervisors/containers offering "strong isolation." Pet. 29-30-32.

Petitioner's arguments attempt to equate the "logical jail" and "strong isolation" functions in Nazario and Ghosh with "separat[ing] the host system from the virtual system," but they do not demonstrate that those functions in either reference is performed by an "internal firewall," as the claims recite. The Petition never identifies where Nazario or Ghosh teaches an "internal firewall"—as that term is used in the '780 patent—to separate host from virtual system. Instead, it argues that the "virtual machine or hypervisor" in Ghosh "performs th[e] same separation" as the claimed "internal firewall." Pet. 29. This ignores that the claimed "separation" is performed by an explicitly recited "internal firewall." Petitioner also argues that "running virtual environments in containers also functions as an 'internal firewall' mechanism that

separates the applications running in the containers from the host OS." Pet. 30. Yet Petitioner does not explain how Ghosh's "container", even if it provides "strong isolation" between network applications, does so using an "internal firewall." Pet. 29-30.

Finally, the Petition includes a note regarding agreement between the parties in district court that the "internal firewall" limitations have a plain and ordinary meaning of "a firewall that separates and restricts interactions between the virtual and host systems." Pet. 20, n. 6. If Petitioner intended to apply that construction to this IPR, it should have said so explicitly, so that Patent Owner could properly respond. And, applying that construction would have meant that Petitioner still bore the burden of showing that the prior art teaches a "firewall," not merely "separating" functionality.

B. Motivation to combine and reasonable expectation of success

The Petition's motivation language is generic: it states that virtual machines "contain damage," firewalls work at multiple layers, and a POSITA "would have" combined them to yield "predictable results." *See, e.g.*, Pet. 31; EX1002 ¶¶122–124. This skips the claimed arrangement's why/how: why would a POSITA specifically implement (a) an

internal firewall (not merely a VM/hypervisor abstraction) to separate host/virtual, and also in the same system, (b) a host-based firewall between the system and the network, and also (c) an external device firewall/proxy? KSR requires a non-conclusory rationale tied to the claimed configuration, not generic "defense measure" statements. The Petition's narrative that these "defense measures" were all separately known in the art, so they should be combined in the claimed manner is hindsight-driven and not supported by the art.

IV. CONCLUSION

The Board should deny institution. The Petition fails to offer a construction for claim terms it expressly argued in district court were means-plus-function terms. The rules required the Petition to identify the corresponding structure in the '780 specification, and then map the prior art to *that* structure. It has not done so. In addition, Petitioner's attempt to justify the combination of Nazario and Ghosh falls short of the reasoned analysis the law requires.

Date: August 20, 2025

Respectfully submitted,

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CERTIFICATION REGARDING WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), Patent Owner certifies that there are no more than 1,744 words in the paper, excluding the portions exempted under 37 C.F.R. § 42.24(a)(1).

Dated: August 20, 2025

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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 August 20, 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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