

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION**

CROGA INNOVATIONS LTD.,

Plaintiff,

v.

AMAZON WEB SERVICES, INC.,

Defendant.

Civil Action No. 1:24-CV-00398-ADA

JURY TRIAL DEMANDED

**REPLY CLAIM CONSTRUCTION BRIEF
OF AMAZON WEB SERVICES, INC.**

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Croga’s “plain and ordinary meaning” non-constructions impermissibly broaden the scope of the claims: they leave technical terms vague and undefined and do not limit the scope of functional limitations as required by § 112, ¶ 6. Adopting Croga’s proposals would mislead and confuse the jury regarding claim scope, allowing Croga to pursue infringement theories completely untethered from the actual invention disclosed in the patent. The Court should reject Croga’s proposals and adopt Amazon’s proposed constructions, which ensure the jury understands exactly “what the patentee covered by the claims, for use in the determination of [non]infringement.” *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997).

I. “computer system” (claims 1, 3, 7, 10, 11, 13, 17, and 20)

Amazon’s construction of “computer system” as “[a] computer, including hardware, operating systems, and software applications running on the hardware” comports with both the claim language and Summary of the Invention, and thus reflects the plain and ordinary meaning of the term in the context of the patent. The claims require “at least one *computer system* configured to connect to the *network*,” thus distinguishing the “computer system” from the “network” and the broader “networked computer system” in the preamble. (780 patent at cls. 1, 11 (emphases added).) In the context of the claims, the “at least one computer system” is a *computer connected to a network*, not a *network of computers*. The Summary of the Invention confirms this distinction, describing the “computer system”—consistent with Amazon’s construction—as comprising a “computer” with user-entry devices, a display device, and computer-accessible data storage. (*Id.* at 3:50-53.)

Croga proposes a “plain and ordinary meaning” construction, but neither specifies that meaning nor explains why Amazon’s construction departs from it. Its arguments against construing “computer system” each lack merit. First, Croga argues that if the patentee wanted to define the computer system as “hardware, operating systems, and software application,” it would

have included these terms in the claims. (See Dkt. 37 (“Resp. Br.”) at 4.) But that is exactly how the patentee described the term in both the Summary of the Invention and Detailed Disclosure of the Invention. (780 patent at 3:25-28, 11:33-34, 4:29-33, 4:14-21.) The logical extension of Croga’s argument is that a Court should never construe claims unless the terms of the construction are recited in the claims. But that makes little sense; courts routinely construe claims to clarify the ordinary meaning of a term for the jury using terms not recited in the claims. See, e.g., *Datatreasury Corp. v. Wells Fargo & Co.*, No. 2:05-CV-291, 2009 WL 1393068, at *65 (E.D. Tex. May 11, 2009) (construing “payer bank’s draft” as “a written order by a first bank (drawer bank) instructing another bank to pay a specified sum to another party (payee) on demand.”); *Gobeli Rsch. Ltd. v. Apple Comput., Inc.*, 384 F. Supp. 2d 1016, 1027 (E.D. Tex. 2005) (construing “reallocating” as “a first assignment of ‘something’ and then a reassignment of that ‘something’”).¹

Second, Croga argues that a “computer system” cannot include hardware because some aspects of the claims, like firewalls, can be implemented in software. (Resp. Br. at 4.) But the Summary of the Invention makes clear that the computer system must include the hardware necessary to store and operate the “computer-readable instructions” that implement the firewalls: “[t]he firewalls and other communication restrictions of the system are implemented preferably by software, i.e., using *computer-readable instructions stored on the computer systems* that cause those computer systems *to operate* according to the firewall and communications architecture as described herein.” (780 patent at 4:57-62 (emphases added).) Without hardware in the computer system to process the software, nothing would operate in accordance with those computer-readable

¹ Croga agrees that Amazon’s proposed construction of the term “network isolation” reflects its plain and ordinary meaning, and similarly agrees-in-part with Amazon’s proposed plain meaning of “internal firewall.” (Dkt. 34 (“Op. Br.”) at 4; Resp. Br. at 9-11.)

instructions.²

Third, Croga argues that independent claims 1 and 11 do not include “the concept of ‘applications.’” (Resp. Br. at 5.) This argument fails. Claims 1 and 11 require “a software module operating on the computer system.” As the Summary of the Invention explains, a software module is another name for a software *application*, *e.g.*, an executable file. (780 patent at 2:5 (“secondary payload software module, commonly an .exe file.”))

Finally, Croga argues that the claimed “host system” itself may be a whole computer system separate from the “at least one computer system” in the claim. (Resp. Br. at 3-4.) But the disclosures it cites from the Summary of the Invention only confirm that the “host system” operates *on* a “computer system,” which is a laptop or desktop, and that the “host system” corresponds to an operating system and one or more program applications. (780 patent at 3:25-28, 3:56-58.) The “host system” cannot be its own computer because the claims require that the “at least one computer system” “compris[es]” both the host system and the virtual system. (*Id.* at cls. 1, 11.) The claims similarly require that the two are separated by an “internal firewall,” *i.e.*, a firewall internal to the “at least one computer system” on which both the host system and virtual system reside. (*Id.*)

The Court should therefore adopt Amazon’s construction, which is the plain and ordinary meaning of “computer system” in the context of the claims and specification.

II. “host system” (claims 1, 3, 7, 10, 11, 13, 17, and 20)

The Court should construe “host system” to clarify its meaning for the jury. Amazon’s

² Croga argues that the claimed “computer system” is “not limited to a ‘computerized work station.’” (Resp. Br. at 5.) But the 780 patent uses the terms “computer system,” “computer,” and “computerized workstation” interchangeably. (780 patent at 7:20-24, 7:36; 7:63-64, 7:67, 8:2, 8:6, 8:18, 9:23, 9:55, 10:4, 10:5, 10:45.) In fact, the only two figures in the patent identify the claimed “at least one computer system” as a “Workstation or Laptop.” (780 patent at Figs. 1-2.)

construction, derived from the claim language and the Summary of the Invention, reflects the plain and ordinary meaning of the term.

Contrary to Croga’s assertion, the patentee did not need to expressly recite in the claims that the host system includes an operating system. (*See* Resp. Br. at 6.) That is because the claims require that the “virtual system is a *separate* operating system or a software module.” (780 patent at cls. 1, 11 (emphasis added).) The word “separate” modifies the word “operating system,” making clear that there must be a different operating system on the host system. Indeed, the Summary of the Invention confirms that the host system includes “an operating system and one or more program applications.” (*Id.* at 3:56-58.)

Similarly, it does not matter that the claims do not expressly recite a “hypervisor” (Resp. Br. at 7) because the host system in the 780 patent must include a hypervisor to create the virtual machine environment. The claims require that the computer system includes a virtual system. (*See* 780 patent at cls. 1, 11.) In order to have a virtual system, the virtual system must first be created. And the Summary of the Invention requires a hypervisor to create and run a virtual system.³ (*Id.* at 5:16-18 (“Also operating on the host computer is a hypervisor system that creates a virtual machine environment that is separate from the host computer's operating system.”); 3:34-35 (“The virtual guest runs on a hypervisor”).) Accordingly, the host system—the non-virtual software part of the claimed computer system—includes a hypervisor to create the virtual system.

Croga’s non-construction would create confusion for the jury as to the meaning and scope of the host system. The Court should therefore adopt Amazon’s construction to “ensure that the jury fully understands . . . what the patentee covered by the claims.” *Power-One, Inc. v. Artesyn*

³ Even if the host system could have variety of architectures (Resp. Br. at 7-8), these architectures would still require a hypervisor to support a virtual system required by the claims.

Techs., Inc., 599 F.3d 1343, 1348 (Fed. Cir. 2010) (citation omitted).

III. “an internal firewall is configured to separate the host system from the virtual system” / “separating the host system from the virtual system using an internal firewall” (claims 1 and 11)

Croga agrees that the claimed “internal firewall” “separates and restricts interactions between the virtual and host systems,” which Amazon’s proposed construction requires. (Resp. Br. at 9.) However, Croga disputes the *location* of the internal firewall, arguing that it need not be in the host system, and could exist on the virtual system instead. (*Id.* at 9-11.)

Croga’s contention that the “internal firewall” can be on the virtual system lacks merit.⁴ The Summary of the Invention confirms that the “internal firewall” is located “in the host system,” describing it as an “internal host-based firewall *in the host system.*” (780 patent at 5:66-6:2 (emphasis added).) Whether the “internal firewall” is implemented by the hypervisor or some other local program, it always resides within the host system. (*See id.*) As the Summary of the Invention explains, the hypervisor is not the virtual system; rather, the hypervisor runs in the host system and creates and manages the virtual system. (780 patent at 5:16-17 (“Also operating on the host computer is a hypervisor system”), 3:34-35 (“The virtual guest runs on a hypervisor”).) The court should therefore adopt Amazon’s clarifying construction.

IV. “a host-based firewall executed on the computer system” (claims 1 and 11)

Amazon’s construction of this term reflects the plain and ordinary meaning of the term and is consistent with the surrounding claim language. The Federal Circuit’s decision in *Altiris, Inc.*

⁴ Croga cites to *Kaufman* for the proposition a construction should not exclude a preferred embodiment. (Resp. Br. at 10 (quoting *Kaufman v. Microsoft Corp.*, 34 F.4th 1360, 1372 (Fed. Cir. 2022).) But Croga fails to show that an internal firewall in a virtual system is an embodiment of the 780 patent, let alone a “preferred embodiment.” (*Id.*) Indeed, Croga’s citations to the 780 patent only describe the internal firewall in the *host system*. (*Id.*) Moreover, in *Kaufman*, the proposed construction would have excluded the sole embodiment described in the patent. *Kaufman*, 34 F.4th at 1372. Here, in contrast Croga seeks to expand the definition of a claim to include embodiments not even described in the patent. (*See* Resp. Br. at 10.)

v. Symantec Corp. is instructive. 318 F.3d 1363, 1372 (Fed. Cir. 2003). There, the court construed the term “boot selection flag” by recognizing that the words “boot” and “selection” were descriptive modifiers of the commonly defined word “flag.” *Id.* Just as “boot selection” modified “flag,” here “host-based” is a descriptive modifier applied to the term “firewall.” “Host-based” means “based in a host” and the claims recite a “computer system comprising a *host system* and a virtual system.” (780 patent at cls. 1, 11 (emphasis added).) Therefore, “a *host-based* firewall executed *on* the computer system” is a firewall running in the host system of the computer system.

The specification confirms Amazon’s construction. The Summary of the Invention explains that the host-based firewall runs in the claimed host system. “The *host system has a firewall thereon* such that the host computer cannot communicate directly with the internet, except with predetermined trusted sites stored in an internal whitelist data.” (780 patent at 3:31-34 (emphasis added); *see also id.* at 7:42-45 (“The host system 9 also has stored data in the form of software instructions that cause the *host system to have a host-based firewall* 11 that provides restrictive egress from the computer 9.”) (emphasis added).)

Croga incorrectly suggests that Amazon does not define a “host-based firewall,” and that Amazon’s construction does not distinguish the “host-based firewall” from the other two firewalls. (Resp. Br. at 12.) But the patent defines each of the three firewalls based on their location and their function. According to the claims, the function of the “host-based firewall” is to implement network isolation between the computer system and the network. (780 patent at cls. 1, 11.) The parties’ agreed construction of “network isolation” clarifies that the function of the host-based firewall is to “restrict network communications” between the computer system and the network. (Op. Br. at 4.) As described above, Amazon’s construction clarifies the location of the host-based firewall on the host system within the “at least one computer system.” This clarification of the

location of the host-based firewall combined with the agreed construction clarifying its function will inform the jury of the distinction between the host-based firewall and the other two firewalls.

V. “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.” / “implementing network isolation, between one or more untrusted network destinations and the networked computer system, via the at least one device” (claims 1 and 11)

Because “device” is a nonce term that does not convey sufficient structure, this Court should construe these terms under 35 U.S.C. § 112, ¶ 6 and limit the “device” performing the claimed function to any combination of the network firewall and web proxy. Indeed, Croga agrees that the “device” “must take the form” of the network firewall or web proxy to perform the claimed function. (Resp. Br. at 15.)

Croga does not dispute that the word “device” by itself conveys no structure.⁵ Indeed, as explained in Amazon’s Opening Brief, “device” is a black-box term. (Op. Br. at 11-14.) Croga incorrectly suggests the recitation of “network firewall or a web proxy” in the claims provides sufficient structure to the claimed “device.” (Resp. Br. at 15.) But “implement[ing] at least one of a network firewall or a web proxy” is merely another function of the claimed “device”—separate from the function of “implement[ing] network isolation between one or more untrusted network destinations and the networked computer system”—and neither of these functions adds any structure to the claimed “device.” (780 patent at cl. 1; *see also id.* at cl. 11 (similar).) Claim 1 requires only that “the device comprises processor and a memory,” but these general-purpose computer parts cannot provide the required structure.⁶ *Williamson*, 792 F.3d at 1350. And claim

⁵ Croga argues that § 112, ¶ 6 does not apply because the claim does not recite the term “means.” But Federal Circuit law is clear that “other nonce words [(e.g., ‘device’)] that reflect nothing more than verbal constructs may be used in a claim in a manner that is tantamount to using the word ‘means.’” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1350 (Fed. Cir. 2015).

⁶ Croga’s reliance on *WSOU* is misplaced. (Resp. Br. at 15-16.) The *WSOU* court actually construed the disputed “processor” term under § 112, ¶ 6 because the specification described it

11 provides no information regarding the structure of the “device,” only requiring it to implement the claimed functions.

Because “device” is a nonce term that does not convey sufficient structure, the Court should construe these terms under § 112, ¶ 6. As identified in Amazon’s proposed construction, the structure of the device should be limited to filter 4 and firewall 3, which Croga agrees⁷ perform the claimed function of “implement[ing] network isolation between one or more untrusted network destinations and the networked computer system.” (780 patent at cls. 1, 11.)

generically, referring to it as hardware, software, or a combination of both. *WSOU Invs. LLC v. Google LLC*, No. 2022-1063, 2023 WL 6889033, at *3 (Fed. Cir. Oct. 19, 2023). Like the “processor” in *WSOU*, the 780 patent refers to the memory and processor of the “device” generically, using these terms only in claim 1 and providing no explanation in the specification. Furthermore, neither Croga nor the patent itself explains how these generic computing components define the structure of the claimed “device” to a person of ordinary skill in the art, required to avoid construction under § 112, ¶ 6. *Diebold Nixdorf, Inc. v. Int’l Trade Comm’n*, 899 F.3d 1291, 1302 (Fed. Cir. 2018).

⁷ Croga agrees that the structure for performing the claimed function must be “firewall 3 and/or proxy/web-content filter 4.” (Resp. Br. at 15.)

Dated: March 28, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the above and foregoing document has been served to all counsel of record who are deemed to have consented to electronic service via the Court's CM/ECF system.

Dated: March 28, 2025

/s/ Allen W. Wang
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