

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner,

v.

THE UNITED STATES OF AMERICA AS REPRESENTED BY THE
SECRETARY OF THE NAVY, AND
INTELLECTUAL VENTURES II LLC,
Patent Owner.

IPR2025-00341
U.S. Patent No. 7,181,743

**PETITIONER'S AUTHORIZED REPLY
TO PATENT OWNER'S PRELIMINARY RESPONSE**

In its Preliminary Response (“POPR”) (Paper 9), Patent Owner incorrectly seeks to avoid the prior art by narrowly interpreting the claims to include unrecited limitations, and mischaracterizes the prior art. The Board should institute review.

I. Patent Owner's unduly narrow interpretation of the term “event” is not supported by the claim language or the specification.

Welch teaches the claimed “*application computer program ... event correlation capabilities*” (limitation [10.2]) under the plain and ordinary meaning. As explained in the Petition, Welch describes “QoS management software” that includes “the following capabilities: ... (2) track correlation and filtering algorithms.” Ex.1005, 4; Petition, 44-45. While not expressly construing the claims, Patent Owner seeks a narrower interpretation of the term “*event*” that is limited to “application statuses, states, performance, and internally detected errors.” POPR, 22. These additional limitations are not recited in the claims and unsupported by the specification.

Patent Owner incorrectly attempts to distinguish the anti-air warfare (AAW) systems of Welch by excluding software events related to “processing radar sensor data, performing radar tracking initialization and refinement, and distributing radar tracking information to other modules.” POPR, 10. There is no reason to exclude these software events. Nothing in the claim language indicates that an “*application computer program ... event*” refers only to “application statuses, states, performance, and internally detected errors.” POPR, 22. Nor does the claim

language recite anything that would exclude general-purpose software events of AAW systems. While the term “event” may include the types of events the Patent Owner identifies, the term does not exclude general-purpose software events associated with radar-based tracking and guidance systems described in both the ’743 patent and Welch. The Board should decline Patent Owner’s attempt to redraft its claims. *Rembrandt Data Techs., LP v. AOL, LLC*, 641 F.3d 1331, 1339 (Fed. Cir. 2011) (the Federal Circuit “repeatedly and consistently has recognized that courts may not redraft claims.”). Welch’s software detection of radar events is thus an “*event*” within the broadly claimed scope of “*application computer program ... event*.” Petition, 45; Ex.1005, 2-3.

The specification of the ’743 patent similarly does not support Patent Owner’s attempt to import limitations into the claims. Indeed, the ’743 patent refers to “**general-purpose** application event reporting and **event correlation capabilities**.” Ex.1001, 7:40-45. And the example application described in the specification is that of an anti-air warfare (AAW) system. *See* Ex.1001, Figs. 5A-B. This is consistent with the fact that the inventors of the ’743 patent (and the authors of Welch) developed the claimed subject matter on behalf of the United States Navy. *See* Ex.1001, cover page; Ex.1005, Abstract. Accordingly, the specification does not support excluding radar detection events from the term “*event correlation capabilities*.” It is improper to construe the claims in a way that

excludes embodiments unless the claims are so limited. “A claim construction that does not encompass a disclosed embodiment is rarely, if ever, correct.” *Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1320 (Fed. Cir. 2005).

Welch's system includes “track correlation and filtering algorithms,” which are software components that correlate sensor data events. *See* Ex.1005, 4; Petition, 45. And the Naval Surface Warfare Center High Performance Computing testbed described by Welch is a simulator and thus radar detection events are software “events” that are identified and responded to by Welch's system. *See* Ex.1005, 4; Petition, 45-46. The Board should thus reject Patent Owner's claim interpretation, which improperly adds limitations to the term “*event*.” Under the proper plain and ordinary meaning, Welch teaches “*application computer program ... event correlation capabilities*” as claimed.

II. Patent Owner's arguments misunderstand the prior art term “path.”

The Petition shows how Welch teaches “*a first function which determines a state and health of ... the M managed characteristic application computer programs.*” Pet., 49-56. Welch describes a “resource manager” that uses information provided by the hardware and **software monitors**.” Ex.1005, 2; Petition, 56. The resource manager determines the state of the applications through time stamp and path latency information. Ex.1005, 2-3; Petition, 56. “The RTCS continuously sends the application profile (time stamps or **program/path**

latencies) information to QoS Monitors (step 7 of Figure 3).” Ex.1005, 3; Petition,

56. Accordingly, because the RTCS applications provide program/path latency to software monitors of the resource manager, Welch's resource manager determines the state and health of those applications as claimed. Petition, 56.

Patent Owner nevertheless argues that “neither Petitioner nor Petitioner's Expert offers any explanation for why a ‘path’ discussed in Welch is equivalent to an ‘application program’ in the challenged claims.” POPR, 36. Patent Owner also argues that in Welch, it is “the health of the path that is what is being monitored, not the health of the RTCS application.” POPR, 48 (emphasis original). But contrary to Patent Owner's assertions, Welch's resource manager does indeed monitor the state and health of the applications because Welch's “software monitors” receive “program/path latencies” and other information from those RTCS applications. Ex.1005, 2-3; Petition, 56.

Patent Owner's argument ignores the way Welch uses the term “path” to refer to a “program.” “If a sub-path (RTCS program) is terminated due to some hardware/software failure” Ex.1005, 2. “The RTCS continuously sends the application profile (time stamps or program/path latencies) information to QoS Monitors (step 7 of Figure 3).” Ex.1005, 3; Ex.1003, ¶¶188-90. The Petition explains that Welch's resource manager determines the state of the applications (programs) through time stamp and latency information for those applications

("program/path latencies"). Petition, 56 (citing Ex.1005, 2-3).

Additionally, Welch's "software monitors" receive information as to whether the programs/paths are healthy: "If a path becomes unhealthy (misses its deadline), the QoS Monitors detect such a condition." Ex.1005, 3; Petition, 56. Because Welch uses the term "path" to refer to a "program," Welch teaches monitoring the health of an application (program) by monitoring the health of a path. Petition, 56 (citing Ex.1005, 2-3). Regardless of whether a path includes multiple applications, as Patent Owner points out (POPR, 35-40), determining the state and health of a path teaches determining the state and health of applications as claimed. Petition, 56. The Petition's analysis is thus consistent with how "path" is used by the prior art authors (and inventors of the '743 patent).

Patent Owner also argues that "Petitioner has not shown that Welch discloses or suggests determining the 'state and health' of *distinct* application programs, as required by the challenged claims." POPR, 42 (emphasis added). To the extent Patent Owner is arguing that the claim requires monitoring individual applications rather than a group of applications, such an interpretation is contrary to the claim language, which recites monitoring "*M managed characteristic application computer programs.*" Thus, for the reasons explained in the Petition, Welch teaches determining "*a state and health of ... the M managed characteristic application computer programs.*"

Petitioner's Reply to Patent Owner's Preliminary Response
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Respectfully submitted,

Date: June 11, 2025

/Jonathan R. Bowser/

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PETITIONER'S EXHIBIT LIST

Ex.1001	U.S. Patent No. 7,181,743 to Beale et al. ("743 patent")
Ex.1002	Prosecution File History of U.S. Patent No. 7,181,743
Ex.1003	Declaration of Erez Zadok under 37 C.F.R. § 1.68
Ex.1004	<i>Curriculum Vitae</i> of Erez Zadok
Ex.1005	" <i>Distributed, Scalable, Dependable Real-Time Systems: Middleware Services and Applications.</i> " Lonnie R. Welch et al., Proceedings 13th International Parallel Processing Symposium and 10th Symposium on Parallel and Distributed Processing, April 1999 ("Welch")
Ex.1006	" <i>Specification and Modeling of Dynamic, Distributed Real-time Systems.</i> " Lonnie R. Welch et al. IEEE Real-Time Systems Symposium, 72-81, IEEE Computer Society Press, Dec. 1998 ("Ravindran")
Ex.1007	U.S. Patent No. 6,088,727 to Hosokawa et al. ("Hosokawa")
Ex.1008	U.S. Patent No. 6,269,396 to Shah et al. ("Shah")
Ex.1009	U.S. Provisional Patent No. 60/207,891 ("891 provisional")
Ex.1010	IV's Complaint, <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i> , No. 6:24-cv-188-ADA (WDTX)
Ex.1011	Proposed Scheduling Order, <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i> , No. 6:24-cv-188-ADA (WDTX)
Ex.1012	Statistics on District Court Timing
Ex.1013	Interim Procedure for Discretionary Denials in AIA Parallel District Court Litigation, June 21, 2022
Ex.1014	IV's Preliminary Infringement Contentions, <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i> , No. 6:24-cv-188-ADA (WDTX)
Ex.1015	Declaration of Sylvia Hall-Ellis, Ph.D.

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Ex.1016	U.S. Patent Publication No. 2002/0064126 to Bhaatal (“Bhattal”)
Ex.1017	U.S. Patent No. 6,041,306 to Du (“Du”)
Ex.1018	U.S. Patent No. 6,742,020 to Dimitroff (“Dimitroff”)
Ex.1019	Microsoft Computer Dictionary, 3rd ed., 1997, excerpts
Ex.1020	Microsoft Computer Dictionary, 4th ed., 1999, excerpts
Ex.1021	Statistics on District Court Timing (Dec. 31, 2024)
Ex.1022	WDTX 2024 Statistical Public Report, available at https://www.txwd.uscourts.gov/court-information/district-statistics/
Ex.1023	Amended Order Assigning the Business Of the Court (Judge Moses, Jan. 31, 2025)
Ex.1024	LexMachina docket report
Ex.1025	LexMachina docket report
Ex.1026	“Albright Worried Multipatent Trials Ask Too Much Of Jurors,” Law360 (Dec. 18, 2020), at https://www.law360.com/articles/1337976/albright-worriedmultipatent-trials-ask-too-much-of-jurors
Ex.1027	Bifurcation Order – Videolabs, Inc. v. Asustek Computer, Inc. 6:22-cv-00720-ADA (WDTX)
Ex.1028	Joint Claim Construction Statement, <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i> , No. 6:24-cv-188-ADA (WDTX)
Ex.1029	“The economic contributions of Tesla to the California economy, 2018–2021,” IHS Markit (Oct. 2022), available at https://digitalassets.tesla.com/tesla-contents/image/upload/Tesla-California-Economic-Impact-Final-Report-October-2022
Ex.1030	“Tesla’s ‘American-made’ cars won’t get hit as hard by the auto tariffs,” CNN.com, https://www.cnn.com/2025/03/29/cars/american-made-cars-tesla-auto-tariffs/index.html , retrieved Apr. 14, 2025

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Ex.1031	"An Assessment of the Impact of the Inter Partes Review Process under the Patent Trial and Appeal Board on the US Economy," The Perryman Group, available at https://www.perrymangroup.com/publications/report/2021/9/23/an-assessment-of-the-potential-impact-of-expanding-inter-partes-review-ipr-under-the-america-invents-act-on-the-us-economy/
Ex.1032	Notice of <i>Sotera</i> Plus Stipulation for Defendant Tesla, Inc., <i>Intellectual Ventures II, LLC v. Tesla, Inc.</i> , 1:24-cv-884-ADA, ECF No. 59 (WDTX) (May 27, 2025)
Ex.1033	"Tesla's California Footprint," https://www.tesla.com/blog/teslas-california-footprint (retrieved Apr. 25, 2025)
Ex.1034	"FAQs for Interim Processes for PTAB Workload Management," available at https://www.uspto.gov/patents/ptab/faqs/interim-processes-workload-management (retrieved May 13, 2025)

CERTIFICATE OF SERVICE

The undersigned certifies, under 37 C.F.R. § 42.6, that service was made on the Patent Owner as detailed below.

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