

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,
Petitioner,

v.

QOMPLX LLC,
Patent Owner.

Case IPR2026-00325
Patent 12,301,627

PATENT OWNER'S PRELIMINARY SUR-REPLY

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EXHIBIT LIST	
2001	Declaration of Nathan Lowenstein in Support of Notice of Intent
2002	Declaration of Colette Woo in Support of Notice of Intent
2003	Declaration of Sam Malek, Ph.D. [Malek Decl.]
2004	Relationship, MERRIAM-WEBSTER.COM DICTIONARY, https://www.merriam-webster.com/dictionary/relationship (accessed July 8, 2026) [Merriam Webster – Relationship]
2005	Event, MERRIAM-WEBSTER.COM DICTIONARY, https://www.merriam-webster.com/dictionary/event (accessed June 10, 2026) [Merriam Webster – Event]

All emphases are added unless otherwise stated

I. “Relationship Between A Respective Pair Of Entities.”

The POPR demonstrated that the Petition failed to demonstrate that each of Stokes’s event-edges “corresponds to a respective relationship between a respective pair of entities.” POPR, 4-23. The claims separately recite “events” and “relationships,” yet the Petition maps the same Stokes event-edges to both without explaining how a particular event also corresponds to a relationship. *Id.* The Reply confirms the defect.

Petitioner does not dispute that the claimed “event[s]” and “relationship[s]” are presumed to have different meanings, or that the specification treats them as distinct. *See* Reply, 1-2; POPR, 4-12. Instead, Petitioner argues that “the claims require no relationship label, identification of a relationship type, or particular duration.” Reply, 2. But PO proposed none of those requirements. POPR, 4-12. PO argued only that Petitioner must show that Stokes’s event-edges correspond to the claimed relationships, not simply relabel events as relationships. *Id.*

Petitioner also argues that “‘event’ and ‘relationship’ [are not] mutually exclusive” because “event data describing an interaction may identify a relationship.” Reply, 2. That confirms PO’s distinction: event data may be used to identify or infer a relationship, but the event is not automatically the relationship. *See* POPR, 4-12. Petitioner’s “HasSession” example confirms the point. Reply, 2. A logon event may supply data from which a HasSession relationship is identified,

but Petitioner never shows that Stokes performs that identification. *Id.*

Finally, the Reply asserts—without citation—that “[t]he Petition explains the role of, and distinction between, events, event data, and relationships in the Stokes system.” Reply, 1. It does not. The Reply’s new label—“event-derived relationships”—does not identify any Stokes analysis that derives relationship information distinct from the event record itself. *Id.*, 1-2. Nor does Petitioner reconcile the Petition’s treatment of the same edges as relationships for limitation [1.5] and events for claim 2. POPR, 14-15; Pet., 21-22, 37-38. Instead, it simply repeats the disputed conclusion: Stokes’s edges “represent events” but “also correspond to relationships.” Reply, 1. Repeating the Petition’s conclusion does not satisfy Petitioner’s burden.

II. “Attack Path” Limitations.

The POPR demonstrated that the prosecution history requires identifying from the modified graph a prospective attack path of potential compromise involving the newly added entity. POPR, 24-31. Crabtree fails both requirements: Stokes starts from a node already known to be malicious and analyzes paths to identify other already-compromised entities, while Crabtree’s graph updating does not connect the newly added entity to that analysis. *Id.*, 31-38. Petitioner cannot supply either missing link through Dr. Black’s unsupported “obvious use case.” *Id.*, 38-47.

Petitioner’s reliance on dependent claims 2-3 is misplaced. Reply, 2-3. Event

flows containing an anomalous event with a point of origin do not make the independent claims' "attack path" retrospective or eliminate the requirement that it be identified from the modified graph and involve the newly added entity. Nor does claim 18's omission of "could be involved" help Petitioner: Applicant expressly stated that claim 18 was allowable for the same reasons as claim 1, and the Examiner allowed it on that basis. POPR, 29.

Petitioner also selectively focuses on the Examiner's removal of "potentially" and asserts that Applicant distinguished Neil and Altman merely based on "how they purportedly identify attacks." Reply, 3. But the Applicant expressly distinguished those references because they identify "where the attacker has already been in the network" or rely on message traversal "that has already happened." POPR, 27-30. The Examiner then added "an attack path that could be involved in an attack involving the first entity" and allowed the claims. *Id.* The Reply does not even mention the Applicant's statements giving rise to the disclaimer.

Finally, Stokes's references to "possible" or "potential" lateral-movement paths do not cure the defect. Reply, 3. Those paths begin with a known compromised node and are analyzed to identify "other compromised computers." POPR, 31-35. Whether Stokes evaluates one path or multiple paths is irrelevant: its analysis remains backward-looking and untethered to the newly added entity.

Respectfully submitted,

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Date: July 31, 2026

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the following document was served by electronic service, by agreement between the parties, on the date below:

PATENT OWNER'S PRELIMINARY SUR-REPLY

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