

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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MICROSOFT CORPORATION,  
Petitioner,

v.

QOMPLX LLC,  
Patent Owner.

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Case IPR2026-00184  
Patent 12,231,426

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**PATENT OWNER'S PRELIMINARY SUR-REPLY**

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The POPR demonstrated that Petitioner’s grounds fail to satisfy multiple claim requirements. The Reply does not cure those defects and instead relies on unsupported theories that do not address the claim language.

**I. “MULTIDIMENSIONAL TIME-SERIES DATABASE.”**

The POPR demonstrated, based on intrinsic and extrinsic evidence, that the term “multidimensional time-series database” is a specialized database optimized or especially suited at least for interacting with time-series data. Petitioner offers no supported alternative and instead reduces the limitation to any database storing time-based information. On that basis, it relies on Kirti’s repository, which “may be any database.” Ex. 1004, 10:61-63. That cannot satisfy the claim. The Reply does not confront this mismatch and instead points to the data stored, not the database. Nor does Petitioner defend its construction or identify any intrinsic support for its view. Petitioner thus fails to identify any prior-art database that satisfies this limitation.

***Kirti’s Repository May Be “Any Database,” Which Is Fatal To Petitioner’s Theory.*** It is undisputed that Kirti’s repository “may be *any database* or data repository with query capability.” Ex. 1004 [Kirti] 10:61-63; POPR, 13-14; Ex. 2023 [Malek Decl.] ¶ 44. A system that may be implemented using “*any database*” does not teach using a “multidimensional time-series database.” *See* POPR, 9-13.

The Reply never confronts this mismatch. Instead, Petitioner argues that Kirti stores time-based data and generates time-based reports. Reply, 2-3. But that speaks

only to the data, not the database. A general-purpose repository capable of storing time-stamped data is not thereby a time-series database. Petitioner therefore fails to show that Kirti satisfies this limitation.

***Petitioner’s Construction Remains Unsupported.*** As the POPR demonstrated, Petitioner’s theory reduces “multidimensional time-series database” to any database storing multiple attributes over time, yet it offered no support for that view beyond conclusory expert testimony. POPR, 5-9. The Reply does not defend that construction. Instead, Petitioner argues only that PO’s position is “ambiguous” and “identifies no boundary.” Reply, 1. Yet Petitioner’s implicit claim construction is many times more unbounded. PO’s position is well-supported by the intrinsic and extrinsic record, and, in any event, it is Petitioner who bears the burden to establish what the claim requires and show that the prior art satisfies it. 37 C.F.R. §§ 42.104(b)(3)-(4) . It has done neither.

***The Record Confirms The MDTSDB Is Not Any Database Containing Time-Stamped Data.*** The intrinsic and extrinsic record, again, consistently describe a time-series database as a specialized database optimized or especially suited at least for interacting with time-series data. POPR, 9-13. Petitioner’s attack on PO’s extrinsic evidence—that it post-dates the filing date—goes nowhere, as Petitioner does not contend that the meaning of “time-series database” changed. Reply, 1. Its observation that time-series systems may be “built on” general-purpose databases is

beside the point; such systems are specialized by their structure and operation. Nor does Petitioner's focus on the data stored cure the defect. The claim is directed to a specific type of database, not merely to a generalized database that, by virtue of its generality, can store time-stamped data.

The POPR also demonstrated that the intrinsic record is consistent with the art's usage of time-series database as a specialized database. POPR, 12-13. Petitioner argues that the incorporated '147 patent concerns sensor data, but does not identify any intrinsic evidence suggesting that the term "multidimensional time-series database" encompasses any database at all. Reply, 2. Instead, as in the Petition, the Reply parses the terms "multidimensional," "time-series," and "database" separately. Pet., 31-32; Reply, 2; POPR, 9-10. Petitioner's arguments only focus on the data stored in the database, not on how the database is structured. See Reply, 3. But the claim term is directed to a type of database, not merely the presence of time-stamped data. As the POPR explained, that term has a well-established meaning referring to specialized databases. POPR, 10-13.

## **II. ORDER OF STEPS.**

*The Claims Require A Request-Driven Sequence.* The POPR showed that the claims require certain steps to be performed in response to "receiv[ing] a request to authenticate a client." POPR, 15-22. Petitioner does not engage with the claim language and instead relies on boilerplate stating that method steps need not be

performed in order “unless it is impossible to perform a given step before another.” Reply, 3; Ex. 1001, 18:5-7. But the POPR identified precisely that constraint: the system cannot “store ... information about the request,” evaluate “the password” and “the identifier,” or determine whether additional verification is required—including retrieving historical information—unless it has first received the authentication request. POPR, 15-19.

*Pre-Analysis Does Not Satisfy The Claims.* The Reply newly suggests that historical information may be analyzed in advance and later used at login. Reply, 4. That does not satisfy the claims which require “retrieving ... historical information” as part of determining whether additional verification is required for a particular authentication request. Precomputing or pre-analyzing information is not retrieving and evaluating that information in response to the request itself.

*Kirti Still Does Not Perform The Claimed Sequence.* Petitioner’s additional citations to Kirti do not cure this defect. Petitioner still does not identify any disclosure in which the claimed steps are performed in response to a request for access. Reply, 4. That failure is dispositive.

### **III. “SELECT[ING] AN ADDITIONAL VERIFICATION METHOD FROM A PLURALITY OF VERIFICATION METHODS.”**

*Petitioner’s Kirti Theory Fails.* The POPR demonstrated that Kirti at best taught selecting from remediation methods, not verification methods. POPR, 30-36.

In Reply, Petitioner states that “Ground 2 does not depend on every Kirti remedial action being a verification method,” conceding that remediation methods are not verification methods. Reply, 4.

***Petitioner’s Kirti-Coffin Theory Fails.*** The POPR demonstrated that while Coffin includes a list of authentication methods, it does not teach selecting a method among them and at best teaches selecting a delivery method for a one-time use code. In Reply, Petitioner argues that “the ’426 patent identifies ‘MFA methods’—plural—as including ‘one-time use codes sent to a user’s mobile device or email,’ and criticizes prior-art ‘*over-reliance on a single method of delivery*’...” Reply, 4. As seen in the quote above, however, the ’426 does not identify sending one-time use codes to a mobile device or email as separate “verification methods,” but rather as different “method[s] *of delivery*.” See Ex. 1001 [’426] 2:23-34.

Petitioner also argues that “’426 Figure 4 does not limit ‘verification methods’ to irreducible categories.” Reply, 5. But even if that were true, Petitioner does not explain why the “one-time-use codes 415g” category is reducible, particularly where the ’426 treats sending a code to a mobile device or email as different “method[s] of delivery,” not different verification methods. See *id.* Finally, Petitioner does not dispute that Petitioner’s assertions as to what was allegedly “well known” does not substitute for an actual analysis of the proposed combination. POPR, 42-44.

Respectfully submitted,

/Kenneth J. Weatherwax/

Kenneth J. Weatherwax (Reg. No. 54,528)

Nathan Lowenstein, *pro hac vice*

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Date: May 5, 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:

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