

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,
Petitioner,

v.

STERLING COMPUTER CORPORATION.,
Patent Owner.

IPR2025-00270
U.S. Patent No. 8,073,911

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

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<i>Vitronics Corp. v. Conceptronic, Inc.</i> , 90 F.3d 1576, 1582 (Fed. Cir. 1996)	2

EXHIBIT LIST

No.	Exhibit Description
1001	U.S. Patent No. 8,073,911 (“the 911 Patent”)
1002	File History of U.S. Patent No. 8,073,911
1003	Declaration of Dr. John R. Black, Jr.
1004	CV of Dr. John R. Black, Jr.
1005	U.S. Patent Pub. No. 2003/0163537 (“ <u>Rohall</u> ”)
1006	U.S. Patent Pub No. 2002/0120600 (“ <u>Schiavone</u> ”)
1007	File History of U.S. Patent Pub No. 2002/0120600 (“ <u>Schiavone-FH</u> ”)
1008	Document History of U.S. Patent Pub No. 2002/0120600 (“ <u>Schiavone-DH</u> ”)
1009	T. Denehy et al., “Duplicate Management for Reference Data,” IBM Research Report, RJ 10305 (A0310-017) October 7, 2003
1010	Sterling’s Preliminary Infringement Contentions (PIC)
1011	U.S. Patent Pub. No. 2003/0167310 (“Moody310”)
1012	U.S. Patent Pub. No. 2003/0177190 (“Moody190”)
1013	<i>Collaboration Support in Networked Distance Learning</i> , B. Krämer et al, INTERNATIONAL COMPUTER SCIENCE INSTITUTE, May 1997
1014	K. Sierra and B. Bates, “Head First Java: Your Brain on Java – A Learner’s Guide,” 1st Edition, 2003
1015	U.S. Patent Pub. No. 2004/0177271 (“Arnold”)

1016	U.S. Patent No. 8,375,008 (“ <u>Gomes</u> ”)
1017	U.S. Patent Pub. No. 2004-0260698 (MacMillan)
1018	U.S. Patent No. 6,978,274 (Gallivan)
1019	<i>Filtering Spam Using Search Engines</i> , O. Kolesnikov et al., published as Georgia Tech Technical Report, GIT-CC-03-58
1020	U.S. Patent No. 7,380,039 (“Miloushev”)
1021	“Main memory caching of Web documents,” E.Makatos, Computer Networks and ISDN Systems 28 (1996) 893-90
1022 [New]	Deposition Transcript of Dr. Latifur Khan
1023 [New]	File History of U.S. Patent Application No. 10/789,461

I. INTRODUCTION

Patent Owner fails to provide any persuasive reasons why Rohall, Schiavone, and Gomes fail to render all the challenged claims obvious. It instead reargues the content from its Preliminary Response—arguments the Board correctly rejected at Institution.

First, Patent Owner improperly seeks a narrow construction of “*relational references*” that would limit the term to a “relational model”—a construction unsupported by the claims, the specification, and the prosecution history. The Board has already rejected this reading, finding that “*relational references*” are “pointers that point to related messages.”

Second, Patent Owner contends that the claims require compliance policies to be applied at the “*submessage*” level, but the claims contain no such requirement. Even under Patent Owner’s reading, the proposed combination satisfies the limitation: Rohall supplies the messaging architecture with individually identifiable submessage components, and Schiavone provides the rule-based processing framework that operates agnostically to any defined unit of message content. Moreover, Patent Owner’s attempts to distinguish the prior art mischaracterize the references by attacking them individually rather than addressing the combination as a whole—an argument that is contrary to well-established law. And indeed, the Board has already credited Petitioner’s rationale for combining Rohall and

Schiavone and found Patent Owner’s arguments on this point unavailing—and Patent Owner offers no reasons to depart from those findings here.

For these reasons and those set forth in the Petition, the Board should find the challenged claims of the 911 Patent unpatentable.

II. CLAIM CONSTRUCTION

The Board has explained that the “words of a claim ‘are generally given their ordinary and customary meaning,’” as would be understood by a person of ordinary skill in the art at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). There are only two exceptions to the general rule: either when a patentee sets out a definition and acts as his own lexicographer, or when the patentee disavows the full scope of a claim term either in the specification or during prosecution. *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Neither exception applies here.

A. “Relational Reference” Should Not Be Construed as Requiring the Use of a Relational Model.

1. Patent Owner’s Construction Is Unsupported by the Claims

Each independent claim of the 911 Patent recites “*relational references pointing to a plurality of sent submessages.*” Ex.1001, cls. 1, 10, 13, 27. Patent Owner argues i that “*relational references*” require a **relational model** based on a relational database, (Patent Owner’s Response (“POR”), 9–11, 41), but the Board

has already analyzed the relevant language of claim 1 and held that the language “does not recite a relational model, let alone that ‘relational references’ connote requirement of a relational model. Instead, the language supports Petitioner’s interpretation that ‘*relational references*’ are pointers that point to related messages.” Institution Decision (“ID”), at 11. Nothing in Patent Owner’s Response requires the Board to depart from its previous findings.

Moreover, if as Patent Owner argues, the scope of “*relational references*” is limited to the relational model, pointers would be unnecessary, and the repeated use of the claim language “*relational references pointing to*” would be meaningless. The Board agreed, noting that “pointer” and “pointing” are different parts of speech serving distinct roles, and that the claim does not merely recite “relational references pointing.” *Id.*

2. The Specification and Prosecution History Do Not Support Patent Owner’s Construction

The 911 Patent specification provides no support for Patent Owner’s interpretation. The phrase “relational model” appears only once in the 911 Patent specification (with no definition) and does not tie “*relational references*” to “relational model.” It states, instead, that “[a]s described in ... [the ’461] application,¹ **the messaging system uses a relational model** to represent and store

¹ App. No. 10/789,461 (“the 461 App”) is incorporated by reference in the 911 Patent. Ex.1001, 2:57–62.

messages exchanged among the end-users.” Ex.1001, 2:60–62. Patent Owner asserts that the 911 Patent’s “*relational model*” uses tables for managing the relational database, (POR, 9–11, 41), but points to nothing in the 911 Patent to suggest that the claimed “*relational references*” are implemented in association with such tables.

Instead, Patent Owner contends that support for its assertion may be found in the 461 App, but nothing there supports the construction either. For example, the 461 App mentions a relational model but fails to provide any description as to what that means. *See, e.g.*, Ex.1022, 31:15–16 (Patent Owner’s expert conceding that “[t]here is no definition of the relational model” in the 461 App). Instead, the 461 App explains that the messaging system sends and stores **pointers** that provide access to locations of submessages. Ex.2010, [0041] (“an S-Mail includes **a pointer (i.e., a reference) to the locations** of the current submessage 16, along with **pointers** to any history submessages”). The fact that the 461 App repeatedly states that the messaging system sends and stores pointers referencing the locations of the submessages is unambiguous evidence that the claimed “*relational references*” are **not** limited to the relational model. Ex.2010, [0041], [0046].

Additionally, nothing in the prosecution histories of the 911 Patent and the 461 App provide a definition of “*relational references*” or establishes a tie between “*relational references*” and “*relational model*.” Ex.1002; Ex.1023. Further, the Board found that “[w]hile the Specification (and the ’461 application) describes an

embodiment using ‘a relational model to represent and store messages exchanged among the end-users,’ the Specification does not describe any specific correspondence between a relational model and relational references, let alone state that ‘relational references’ require using a relational model.” ID, at 12 (citing Ex.1001, 2:57–62). Accordingly, “*relational references*” should not be limited to the relational model. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 905 (Fed. Cir. 2004) (rejecting the narrow construction when “the claim language is sufficiently broad that it can be read to encompass features not described in the written description.”).

3. Patent Owner’s Construction of “*relational references*” Is Irrelevant and Incorrect

Patent Owner’s assertions that the “911 Patent adopts the relational approach, where message containers and sub-messages are linked via shared keys or identifiers (e.g., foreign keys and primary keys),” (POR, 1), and that a relational model does not use “pointers, but instead links tables through those keys or identifiers, (Ex.2005, ¶34), are wholly unsupported. Nothing in the 911 Patent or its claims disclose anything about linking, shared keys, foreign keys, or primary keys. Ex.1022, 25:7–26:17.

Patent Owner and its expert do not dispute that both the relational and the hierarchical models existed long before the 911 Patent. POR, 8–11; Ex.1022 6:24–7:14. They agree that the inventors of the 911 Patent, as well as POSITAs at the

time, would have been aware of both models and their respective functionalities. POR, 19; Ex.1022, 7:20–8:1. Patent Owner’s expert also stated that a message container and its submessages, as taught by the 911 Patent, can be implemented using either a hierarchical or a relational model. Ex.1022, 6:14–23. However, despite the existence of multiple implementation options available at the time, the inventors of the 911 Patent chose not to confine the purported invention to a “relational model.”

The Federal Circuit has long-recognized that where a patentee demonstrably knew of a particular feature or well-known term—such as one disclosed in the specification, prosecution history (or perhaps in the prior art)—but chose not to include it in the claim language, courts should generally not import that limitation into the claims absent clear disclaimer or lexicography. *See generally Liebel-Flarsheim*, 358 F.3d at 909 (“[T]he omission of reference to a pressure jacket in many of the claims of the applications that matured into the [asserted] patents is a strong indication that the applicants intended those claims to reach injectors that did not use pressure jackets.”).

Moreover, Patent Owner’s proposed construction is incorrect because it improperly imports limitations from the specification—in this case, an incorporated specification. *See, e.g., Arlington Indus., Inc. v. Bridgeport Fittings, Inc.*, 345 F.3d 1318, 1327 (Fed. Cir. 2003) (“We have consistently warned against this approach to

claim construction, which is seldom justified.”); *Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009) (“When consulting the specification to clarify the meaning of claim terms, courts must take care not to import limitations into the claims from the specification.”).

4. “*Relational Reference*” Refers to a Pointer

Contrary to Patent Owner’s assertion, a POSITA would understand that in the context of the 911 Patent, one example of a “*reference*” is a pointer. Ex.1001, 3:6–16 (“a message is a container having relational references to content and/or audit data”); *see id.* at 1:67–2:2, 4:61–64. Such “references” are “relational” because they point to related messages exchanged among users. Ex.1001, 4:63.

First, the claim language itself states that the “*references*” are “*pointing to a plurality of sent submessages.*” *Second*, the incorporated specification explicitly describes a “reference” as a “pointer”—it describes a message exchanged in the “relational messaging system” as an “S-Mail,” where:

an S-Mail includes **a pointer (i.e., a reference)** to the locations of the current submessage 16, along with **pointers** to any history submessages.

Ex.2010, [0041]. In using the definitional language “i.e.” to describe “a **pointer**” as “**i.e., a reference,**” the specification confirms that “a reference” is “a pointer.” *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1374 (Fed. Cir. 2014) (“e.g.” is exemplary, “i.e.” is definitional). The specification also explains that a

reference—consistent with being a pointer—“points to” the location of a submessage. Ex.1001, 4:59–64 (“The [message] container itself does not contain content, but rather **points** to submessages and/or attachments **in which content resides**”). Where the specification describes what a reference *is*, it indicates that a “reference” is a “pointer” to the locations of other submessages. Ex.2010, [0045]–[0046]. Indeed, the Board found that the 461 App “appears to define a reference as a pointer,” ID, at 12, and the Patent Owner advances no evidence for the Board to depart from its position.

III. PATENT OWNER’S ARGUMENTS AGAINST GROUND 1 ARE UNPERSUASIVE

A. Patent Owner’s Arguments Against the Rohall/Schiavone Combination All Fail Because They Attack the References Individually

Patent Owner narrows the obviousness inquiry to whether the Schiavone reference **alone** satisfies certain elements of the 911 Patent claims, but that is not the standard. For example, Patent Owner asserts that Schiavone “does not discuss submessages at all,” (POR, 31), and does not describe “the need to apply different rules of a compliance policy to different submessages,” (POR, 32). *See generally* POR, 33-40. But whether Schiavone **alone** discloses those elements is simply irrelevant—“[a] finding of obviousness . . . cannot be overcome by attacking references individually where the rejection is based upon the teachings of a combination of references.” *Bradium Techs. LLC v. Iancu*, 923 F.3d 1032, 1050

(Fed. Cir. 2019) (quoting *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986)). Additionally, contrary to Patent Owner’s assertion, obviousness does not require each individual reference in a combination to solve the inventor’s specific problem. *See* POR, 33.

B. The Rohall/Schiavone Combination Renders Obvious Applying Different Rules from a Compliance Policy to Each Submessage

Patent Owner argues that the claims require applying different rules of a compliance policy at the “*submessage*” level and that the Rohall/Schiavone combination does not render these limitations obvious. *See generally* POR, 31-40. However, Patent Owner’s argument ignores the fundamental contribution of each reference by addressing them separately and refuses to address the combination. *See* discussion *supra* at § III.A.

As the Petition explains, Rohall establishes the foundational messaging architecture comprising identifiable “*messages*” and “*submessages*,” and Schiavone provides “*a compliance policy describing rules.*” Pet., 21–29, 37–40. For example, Rohall’s thread-handling model, which includes distinct internal message components such as original messages, replies, and “shadow document” structures, therefore provides the granular units that are discrete representations of components inside a messaging architecture upon which Schiavone’s rule-based processing (involving rules of a compliance policy) can be applied at differing levels of specificity. Rohall’s system identifies, tracks, and processes parts of a message

individually, not merely as an indivisible whole because in Rohall, a “[s]ingle tree document . . . include[s] all of the meta and linking data of the **individual nodes** within the conversation thread tree. Ex.1005, [0064].

Moreover, Dr. Black explained that a POSITA reading Rohall therefore would have understood that the 911 Patent’s architecture is mirrored in Rohall’s design which treats a message as a container that “itself does not contain content but rather points to submessages and/or attachments in which content resides.” *See* Ex.1003, ¶161 (“[A] POSITA would have understood that Rohall’s description of shadow documents including ‘pointers’ to children documents would be understood by a POSITA to be describing values that ‘point’ to the ‘location’ of the children document data.”); Ex.1001, 4:61–65, Figs. 2–3. Patent Owner’s expert does not dispute that Rohall discloses submessages as a part of the conversation thread. Ex.1022, 61:22–62:1 (“Yeah, Rohall discloses submessages as part of the conversation thread.”).

Schiavone supplies the rule processing engine that determines whether particular messaging content is accessible to a given user based on sender/recipient identity and rule applicability. Schiavone discloses “processing messages based on determining applicability to specific senders, receivers and content of messages” with delivery occurring only if “the recipient’s profile data is in compliance with the applicable rule.” Ex.1003, ¶209 (citing Ex.1006, [0016], [0031]–[0034]).

Conversely, “if the recipient’s profile data is determined not to be in compliance, then the electronic mail message is rejected.” Ex.1006, [0033]–[0034]. Schiavone’s rule-based logic is content-, sender-, and recipient-based. Contrary to Patent Owner’s assertion, nothing in Schiavone states that this conditional-processing logic must be applied only to entire messages. Schiavone’s teachings of “processing messages” are agnostic and therefore applicable to any defined unit of message or sub-message content both in Schiavone alone, and in the proposed Rohall/Schiavone combination.

Indeed, Schiavone explains that its teachings of rule-based processing of email messages are flexible. In one instance, a recipient-profile-data-based rule (such as COPPA in the United States) is used to determine whether the recipient’s profile data is in compliance with the applicable rule and the electronic mail message (e.g., “commercial electronic mail communications” is delivered to the recipient). Pet., 44–45 (citing Ex.1006, [0029], [0033]). Critically, Schiavone explains that “rules may be implemented for a wide variety of applications, including compliance with applicable laws,” and “[a]ccordingly, a mail message can be automatically processed and consequently filtered or routed based on a patchwork of applicable laws, regulations and **best practices applicable to the specific sender, receiver and content of the e-mail message.**” Pet., 45 (citing Ex.1006, [0007], [0016]) (emphasis added); Ex.1003, ¶¶194–198. This indicates, for example, that a first

law/regulation is “*applicable to*” an e-mail message associated with a first sender-receiver pair, and **a second law/regulation** (i.e., a “*different rule of the compliance policy*”) is “*applicable to*” an e-mail message associated with a second sender-receiver pair. Thus, Rohall/Schiavone discloses that “*different rules of the compliance policy are applicable to different ones of the plurality of sent submessages*” for at least this reason.

Additionally, Rohall/Schiavone discloses “*different rules of the compliance policy are applicable to different ones of the plurality of sent submessages*” for another reason. Schiavone describes an example in which a “COPPA rule” is “*applicable to*” “commercial electronic mail communications” by forbidding delivery of commercial electronic mail communications to children aged thirteen and under. Ex.1006, [0029], [0033] and [0042]. And, as another example, Schiavone teaches “a company-developed rule” “*applicable to*” an electronic mail message associated with handling work flow transaction in an organization by “requir [ing] internal approval (e.g., by clicking an appropriate button or typing OK, etc.) from a purchasing agent, a supervisor, an accountant, and a vice-president . . . before the message is able to be sent to the vendor.” Ex.1006, [0036]. As implemented in the Rohall/Schiavone combination, these additional examples expressly describe “*different rules of the compliance policy are applicable to different ones of the plurality of sent submessages.*”

Critically, even Patent Owner’s expert conceded that Schiavone would apply “*different rules of the compliance policy*” to each subsequent message (i.e., “*submessage*”) in an email chain. Ex.1022, 67:24–69:15, 69:7–15 (“So it’s your testimony that the **reply message** in this instance [in Schiavone] would have **different rules applied than the original message**; is that right? A. **Correct.**”) (emphasis added). Furthermore, Patent Owner’s expert also testified Schiavone provides a system with **different senders and recipients** and that in the COPPA example, if a message was replied to, it would apply different rules to different messages based on the identity of the sender and the recipient. Ex.1022, 62:13–25, 62:25 (“Yeah, so they have different senders.”); *Id.*, 63:2–12, 63:11–12 (“Yeah, it can be different recipients, yes.”); *Id.*, 69:7–8 (“In that case, there is a possibility that a different rule may be applied.”).

Putting these teachings together, Rohall provides the “*submessage*” level building blocks/representation with distinct internal message components that can be individually referenced within a messaging architecture and Schiavone provides the selective and different compliance rule mechanism for determining which users may view and which content. The combination yields the ability to apply rules to each submessage, because Schiavone’s conditional logic operates on attributes of the sender, recipient, and underlying content, and Rohall identifies the specific content units (submessages) to which those rules can be applied.

Lastly, Patent Owner’s “teaching away” argument (POR, 31) is correctly refuted by the Board in its Institution Decision (ID, at 23-24) and Patent Owner provides no argument as to why the Board should depart from its prior findings. Patent Owner relies on Rohall’s statement that “users must locate and act on each message individually” and that this is “time consuming” and results in message items being “disconnected.” POR, 38, 49. However, the Board found that “Rohall does not criticize applying rules to messages; Rohall criticizes the difficulty in sending entire message threads.” ID, at 12, 23–24. The passages Patent Owner relies on concern user inconvenience, not any technical incompatibility with rule-based processing.

Accordingly, the combination of Rohall and Schiavone satisfies the selective application of rules and/or applying different rules at the “*submessage*” level. Accordingly, Patent Owner’s argument fails.

C. The Rohall/Schiavone Combination Renders Obvious “Relational References Pointing to a Plurality of Submessages”

Patent Owner argues that “*relational references*” requires a “*relational model*” including a “*relational database*.” POR, 40–41. As explained above, Patent Owner’s argument for that narrow construction should be rejected. *See* §II.A.

Applying the proper construction, the Board preliminarily found that the Petition demonstrated that feature in Rohall. ID, at 21–22 (citing Pet. 62, *id.*, 23–24, and *id.*, 25–27). As the Petition explains, Rohall’s shadow document has a data

structure that includes pointers to other messages in a conversation thread, e.g., Parent Document IDs and Child Document IDs which point to message replies. Such pointers disclose “*relational references pointing to a plurality of sent submessages.*” ID, at 21–22 (citing Pet. 62, *id.*, 23–24, and *id.*, 25–27). Patent Owner does not dispute these findings under the construction adopted by the Board. POR, 40–45.

In any event, Rohall discloses the same “*relational references*” as in the 911 Patent. For example, Patent Owner explains:

[T]he 911 Patent and ‘461 Application demonstrate that the invention uses a relational model. In the ‘911 Patent, each tuple or sub-message is assigned a **unique ID**, which serves as the primary key for that relation. EX2005, ¶¶30, 120 (citing EX1001, 5:55–60).

Patent Owner’s expert contended that a “unique ID”—as disclosed in the 911 Patent—is a “relational reference” even under Patent Owner’s narrow construction:

Q. [R]ecall that in the ‘911 Patent, each tuple or submessage is assigned a unique ID, which serves as the primary key for that relation. So, again, is it your opinion that a relational reference, as used in the ‘911 Patent, can be a unique ID?

A. So unique ID, **using a unique ID, yes, you can establish the link or relational reference**, but not but necessarily -- unique ID is one way to do it.

Q. Okay. And **Unique ID is one example of a relational reference**; is that right?

A. Correct.

Ex.1022, 43:1–15.

Rohall also discloses unique IDs that comprise pointers and, thus, “*relational reference[s]*,” even under Patent Owner’s incorrect narrow construction. For example, Rohall explains that “shadow document 400 comprises an Original Document Identifier (ID) **402**, a Parent Document ID **404**, an optional Root Document ID **406**, Zero or more Child Document IDs **408a-n**, and optional Meta Data fields **410a-n**.” Ex.1005, [0057]. Rohall then explains that “Original Document ID **402 may comprise a pointer to the original document**,” “Parent Document ID **404 may comprise a pointer to the immediate parent document**,” and “Child Document IDs **408a-n** may comprise a list of pointers to the immediate children documents.” Ex.1005, [0057]. Critically, Rohall explains that “[i]n the illustrative embodiment the value of **Ids 402-408 may be the Notes ID value** for a document.” Ex.1005, [0057]; *see also* Ex.1005, Figs. 4 and 17B; Pet., 25–26. The “Notes ID value” in Rohall is a “unique identifier,” Ex.1005, [0049], which Patent Owner’s expert conceded on cross-examination. Ex.1022, 51:13–16 (“Q. Do you agree the **Note ID value** is a unique identifier in the context of Rohall? A. **Yes, in the context of Rohall, it is a unique identifier.**”).

Accordingly, Rohall/Schiavone discloses “*relational references*” under both the Board’s and Patent Owner’s construction.

D. The Petition Provided Sufficient Rationale for Why a POSITA Would Be Motivated to Combine Rohall and Schiavone

Contrary to Patent Owner’s assertions, the Petition provides sufficient rationale for why a POSITA would have been motivated to combine Rohall and Schiavone. Patent Owner’s position rests on two core assertions: (1) that the Rohall/Schiavone combination supposedly lacks multiple limitations, which have already been addressed (*see* discussion *supra* at § III.A) and (2) that a POSITA would have no motivation to combine the references.

Patent Owner’s expert does not, however, dispute that Rohall discloses “submessages” (Ex.2005, ¶83 admitting that Rohall identifies “parts of a thread”) and yet, Patent Owner improperly asserts that a POSITA “would not look to Rohall at all.” The Board already rejected that framing, finding that “Petitioner adequately shows that the ordinarily skilled artisan would have been motivated to combine Rohall and Schiavone,” (ID, at 18), and further that Patent Owner’s arguments about the references addressing different “problems” do not negate the motivation provided by Schiavone’s compliance and governance features (ID, at 29). The Board also held that the limitation regarding selective rule-application is satisfied because “Schiavone’s example appears to do that.” ID, at 22–23.

The premise that Rohall is irrelevant because the 911 Patent allegedly “solves the problem of submessages being replicated” and because Rohall’s system allegedly “does not address the problem of replicating submessages” mischaracterizes the art. As Dr. Black explains, Rohall in fact identifies the same class of e-mail-management and filtering issues described in the 911 Patent where users become “overwhelmed by the volume” of electronic messages, “lose important items,” and encounter difficulty managing message threads when replies and forwards cause messages to become disconnected. Ex.1003, ¶¶117–118 (citing Ex.1001, 1:36–40 and Ex.1005, [0006], [0059], and [0012]). Rohall further identifies that message items in a thread can become “disconnected” when users must “locate and act on each message individually,” which is “time consuming” (Pet. 6; Ex.1005, [0006], [0008]). Those disclosures show that Rohall, like the 911 Patent, is directed to organizing and processing multi-message electronic mail conversation threads and structures and provides the very messaging structure in which “*submessage*” level rule application (such as that from Schiavone) is operable. Patent Owner’s attempt to distinguish Rohall on the ground that it describes “gaps in the threads” is not successful. It simply confirms that Rohall addresses the management of message thread structures, which is squarely relevant to a system that applies compliance rules to the outgoing components of such threads.

Schiavone, in turn, supplies the rule-processing functionality by teaching that “the recipient’s profile data is referenced” and that “it is determined whether the recipient’s profile data is in compliance,” (Pet., 49; Ex.1006, ¶¶33–34), including that “the mail message should be delivered to a U.S. recipient only if the recipient is over the age of 13” and that “the same message sent to a 10 year old in France could result in a determination of compliance.” Pet., 41; Ex.1006, ¶31. As the Board found, this shows rule-application to each sent instance. ID, at 22–24. Schiavone applies rule-based processing to email messages based on the “recipient’s profile data,” “message type specifier,” and “rule” associated with it, and Rohall handles the components of message threads. Nothing in the art suggests these teachings cannot coexist. In fact, as Dr. Black explains in detail, Schiavone’s rule-based processing provides the benefits, which a POSITA would have understood and, as such, combined with Rohall’s teachings to improve Rohall’s electronic messaging system. Ex.1003 ¶¶119–124.

Patent Owner next argues that “shadow documents” in Rohall would increase storage, and that this would discourage a POSITA from looking to Rohall. This argument likewise fails. Rohall’s disclosure that its system creates “shadow documents” is not a criticism of the approach and does not suggest that the method would exacerbate the 911 Patent’s identified storage concerns. Nothing in Rohall

indicates that shadow documents create a prohibitive burden or that they impede rule-based processing. Actually, quite the opposite—Rohall teaches:

To reduce memory requirements, while still providing the functionality of the invention, the data from all shadow documents within a conversation thread may be Stored in a Single tree document within a Lotus Notes database, instead of multiple documents. In such embodiment, a single tree document may include all of the meta and linking data of the individual nodes within the conversation thread tree and may be kept in the database using XML format or other markup language utilizing tags. Further, for run-time operation, the tree “documents” may be represented only as data structures within the computer memory. Such implementation may be more efficient in an environment where the thread trees can be recomputed quickly relative to storing and retrieving the thread trees from a memory.

Ex.1005, [0064].

Therefore, Patent Owner’s argument improperly assumes that a POSITA would reject otherwise beneficial functionality simply because the reference discusses using an internal data structure. Rohall’s internal use of shadow documents does not undermine the motivation to incorporate Schiavone’s rule-based processing, nor does it suggest incompatibility. As Dr. Black explains, Rohall’s “shadow documents” and Schiavone’s rule engine are both neutral software, require no specialized hardware, and run on commercially available operating systems, such

as Windows or Unix, with no incompatibility. Ex.1003, ¶124 (citing Ex.1005, [0041]–[0043]; Ex.1006, [0020], [0065]).

Patent Owner also argues that moving from the hierarchical model described in Rohall to the relational model claimed in the 911 Patent would not be possible. But the 911 claims do not require any specific storage model, and the Board expressly rejected Patent Owner’s improper attempt to import unclaimed requirements, holding that “[t]he claim does not recite, and does not implicitly require, that there are different rules for different submessages” and that Patent Owner “argues features the claim does not require.” ID, at 23. Nothing in Rohall prevents the incorporation of rule-based processing, and nothing in Schiavone depends on a particular email messaging architecture.

Patent Owner next argues that Petitioner’s expert relies on “generic statements,” but Patent Owner identifies no requirement that a POSITA’s motivation must match the inventor’s specific objective. Petitioner’s expert cites Rohall’s identification of user frustration and Schiavone’s “rule-based processing of electronic mail messages” as reasons a POSITA would understand the combination. Moreover, Patent Owner focuses solely on Rohall in its arguments for motivation to combine, but even its own expert stated that motivation to combine can be from documents outside Rohall. Ex.1022, 59:9–13. Patent Owner’s allegations are unsupported and do not refute with any contrary evidence.

Finally, Patent Owner argues that Petitioner is using the claims “as a roadmap.” But Petitioner’s combination is grounded in the teachings of the references themselves, rather than the claim language. The argument that Schiavone does not use the word “submessage” or that Rohall’s data structures differ from Patent Owner’s preferred implementation does not defeat the combination. Especially when the Board has already found that neither reference teaches away and that the claimed rule-application requirement is met. Patent Owner’s “hindsight” allegation is equally unsupported.

Accordingly, Patent Owner’s assertion that no skilled artisan would look to Rohall or combine Rohall with Schiavone simply fails in view of the teachings in the prior art.

IV. PATENT OWNER’S ARGUMENTS AGAINST GROUND 2 ARE UNPERSUASIVE

A. The Rohall/Schiavone/Gomes Combination Renders Obvious Claims 9 and 27

Patent Owner argues that the Rohall/Schiavone/Gomes combination does not render obvious Claims 9 and 27 of the 911 Patent. Patent Owner’s argument fail because they depend solely on the notion that Gomes alone does not disclose “*submessages*.” In particular, Patent Owner argues that Gomes’s techniques must be applied at the submessage level, (POR, 59), but that argument fails as a matter of

law because it is based on Gomes alone, not on the Rohall/Schiavone/Gomes combination. *See* discussion *supra* at §§III.A, III.B, III.C.

V. CONCLUSION

Claims 1–13, 15, 18, 20–21, and 27 of the 911 Patent are unpatentable for the reasons discussed above.

Dated: March 17, 2026

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

I hereby certify that this Petitioner's Reply to Patent Owner's Response complies with the limitations of 37 C.F.R. § 42.24(c)(1). The Reply contains 4,898 words (as determined by Microsoft Word), excluding those sections exempted by 37 C.F.R. § 42.24(c). Accordingly, this Reply is under the word count limit of 5,600 words.

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I certify that on this 17th day of March, 2026, true and correct copies of the Petitioner's Reply to Patent Owner's Response and Exhibits 1022-1023 were served via electronic mail on the following counsel for Patent Owner:

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