UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

METARAIL, INC.,
Patent Owner.

Case No. IPR2024-01270
Patent No. 9,633,378

PETITIONER'S REQUEST FOR REHEARING OF DECISION DENYING INSTITUTION OF *INTER PARTES* REVIEW

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I. THE BOARD'S DECISION MISAPPREHENDED THE SCOPE OF THE CLAIMS & THE PETITION'S RELIANCE ON BELANGER AND HALEVY IN COMBINATION

The method claims of the '378 Patent require use of a "*normalized variable data database representing*" a so-called "*universal variable map*" ("UVM"). Paper No. 11 ("DI"), 26. The database representing the claimed UVM includes "*a set of normalized variables*" — nothing more. DI, 20. In the claimed mapping steps, the normalized variables of the UVM ***are used*** to create a mapping of field identifiers to one another. The claimed UVM ***does not require storage of such field mappings***. The Board's denial of institution, however, misapplies the claimed mapping ***step*** as claimed UVM ***structure***, which it is not. This confusion was driven by PO's insistence that the '378 Patent's clams be limited to the "non-limiting" UVM example (EX1001, 9:66-67) of Table 1 of its specification. POPR (Paper No. 6), 4-5 (citing EX1001, 9:66-10:8), 21-22 (same), 26 (same); DI, 5 (focusing on Table 1 example in discussion of '378 patent). The claims cannot be limited to a "non-limiting" specification embodiment despite PO's clear disavowal.[1] *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1327 (Fed. Cir. 2012)

[1] Petitioner does not concede this disavowal was proper. *See Marine Polymer Techs., Inc. v. HemCon, Inc.*, 672 F.3d 1350, 1364 (Fed. Cir. 2012) ("If, in [post grant proceedings], the examiner determines that particular claims are invalid and

("[I]t is improper to read limitations from a preferred embodiment described in the specification – even if it is the only embodiment – into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.") (internal citation omitted).

Further, the Board considered secondary reference Halevy in isolation, concluding that its database operates differently than the UVM structure of the '378 Table 1. DI, 22-26, 28-30. This analysis overlooks that Halevy's database is accessed by Belanger in the petition ground to meet the claimed mapping ***steps***. That is, the petition ground, just like the '378 patent, uses a database of normalized variables (Halevy) to provide a field mapping for the field(s) provided by Belanger as inputs. Petition (Paper No. 2), 39, 46-50. The Board's conclusion that Halevy alone does not provide such a stored mapping (or identical UVM structure of the '378 specification) misread the claims and overlooks the proposed combination of references, *i.e.*, a "form database" that links fields from different websites together by linking them to the same "SO-properties," as disclosed in Halevy, in combination with the fields input by Belanger. The Board's analysis instead compared Halevy's "form database" to an exemplary data structure in the '378

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need amendment to be allowable, one would expect an examiner to require amendment rather than accept argument alone.").

Patent's specification, without acknowledging the Petition's use of Belanger to map fields as claimed, through use of a same normalized database.

A. The Petition Showed that Halevy's Form Database in Belanger/Halevy meets [1C]

As Limitation [1C] makes clear, the UVM does not require any stored mapping; rather, the "*mapping*" step of [1C], which is performed "*using*" a "*database representing a [UVM]*," must accomplish the ***function*** of "*linking computer-readable field identifiers*," with the particular structure of the UVM being unspecified:

> ***mapping*** the plurality of computer-readable field identifiers to one another ***using*** a set of normalized variables stored in a ***normalized variable data database, the normalized variable data database representing a universal variable map*** of searchable classes and attributes of products or services on the Internet, ***the mapping linking computer-readable field identifiers*** of the plurality of sites or applications;

EX1001, 22:21-28 (emphasis added).

The Board split Limitation [1C] and analyzed the pieces separately. *See* DI, 20-26 (analyzing "*mapping…stored in a normalized variable data database*" as Limitation [1C(i)]), 26-31 (analyzing "*the normalized variable data database representing a [UVM]… the mapping linking computer-readable field identifiers of the plurality of sites or applications*" as Limitation [1C(ii)]). In isolating the

limitation this way, however, the Board lost sight of the limitation as a whole by treating the "*the mapping*..." language in the last clause of the limitation as a ***structural*** requirement of the database representing the UVM, rather than as a statement that the "*mapping*" ***step*** of Limitation [1C] has to accomplish "*linking*." *See*, *e.g.*, DI, 27 (crediting Patent Owner's contention that "limitation [1C(ii)] 'reinforces that the required mapping ***in the normalized variable data database*** must provide 'linking' between field identifiers of a [multiple] 'plurality of sites or applications [on the Internet]'") (emphasis added) (quoting POPR, 26); *infra* §I.B.

The Petition showed that when [1C] as a whole is properly interpreted, the limitation is met in Belanger/Halevy by Halevy's "form database" containing information about fields from different websites disclosed by Belanger (and provided to Halevy to identify the claimed "*mapping*" as presented in Ground 1). *See* Petition, 39, 46-50. Specifically, the Petition showed that Halevy discloses the required *normalized variable data database* because Halevy discloses a single database in which fields on different websites may be mapped to the same "SO-property" (*i.e.*, normalized variables). Petition, 46-48; DI, 20-21. The petition then showed that Halevy's database "represent[s] a universal variable map" with a "mapping linking computer-readable field identifiers" because fields from different websites that are mapped to the same SO-property are thereby mapped to each other. Petition, 49; DI, 26-27. So, in the Belanger/Halevy combination underlying

all the Petition's Grounds, when fields on two different websites disclosed in Bellanger (*e.g.*, *a* car reservation website and a third-party travel/attraction website) are both mapped to the same "SO-property" in Halevy's "form database" (*e.g.*, SO-properties for car "make" and "model"), the SO-properties in the database are *a set of normalized variables stored in a normalized variable data database*, with the database *representing a UVM*, and the Belanger/Halevy combination *uses* the fact that fields are mapped to the same SO-property to accomplish a *mapping* of the Belanger field to one stored in Halevy's database, with the result of *mapping linking* the *field identifiers of the plurality of sites* to each other, as the claim requires. *See* Petition, 39, 42-43, 47-49; *infra* §I.C. But as explained *infra* §I.B, the Grounds' mapping to Belanger/Halevy was not addressed, because of the misapprehension in claim construction.

B. The Board Misapprehended the Proper Construction to Arrive at a Narrow Construction Limiting the Claims to the Specification

As discussed below, the Board's analysis with respect to [1C] effectively limited the claims to the "non-limiting" (EX1001, 9:66-67) Table 1 of the specification. As a result, the Board misapprehended the correct analysis, and compared the prior art to Table 1 of the '378 Patent's specification, rather than comparing the art to the claim language as required. *Corephotonics, Ltd. v. Apple Inc.*, 84 F.4th 990, 1003 (Fed. Cir. 2023) ("In determining whether a claim is invalid as obvious, we compare the prior art ***to the claim language***, and if

necessary, after the claim language has been properly construed when the meaning or scope is in dispute.") (emphasis added).

In the section of the Board's decision entitled "The '378 patent (Ex. 1001)" (DI, 3), the Board focused on the exemplary "normalized variables in a universal variable map" shown in the patent's Table 1. DI, 5 (citing EX1001, 9:60-65, 10:1-7). Table 1 (shown below) is a database table with rows corresponding to different "normalized variables," in which, *e.g.*, the data fields "Orig," "Depart_City," and "From" are grouped together in one row and associated with the normalized variable "from," and the fields "Dest," "Arrival_City," and "To" are associated with the normalized variable "to." EX1001, 10:1-7. Thus, in the Table 1 example, the UVM comprises a structure that maps fields from different websites to each other directly by placing them in the same row for a given normalized variable.

Web Sites	xxx.com	yyy.net	zzz.org	. . .	Normalized Variables
Variable 1	Orig	Depart_City	From	. . .	from
Variable 2	Dest	Arrival_City	To	. . .	to
Variable 3	. . .	. . .	. . .	. . .	. . .
. . .	. . .	. . .	. . .	. . .	. . .

But despite the Table 1 example being explicitly labeled as "non-limiting," the Board's analysis effectively compared Halevy's "form database" to the structure described in Table 1, overlooking the actual language of Limitation [1C]. For example, in analyzing the first part of the Limitation, which the Board called

[1C(i)], the Board held that "Halevy's disclosure" was "[m]issing…any teaching or suggestion that a 'plurality of computer-readable field identifiers' are mapped 'to one another' as required by claim 1." DI, 22. Then, in analyzing [1C(ii)], the Board noted that "Patent Owner contends limitation [1C(ii)] 'reinforces that the required ***mapping in the normalized variable data database*** must provide 'linking' between field identifiers of a [multiple] 'plurality of sites or applications [on the Internet].'" DI, 27 (emphasis added) (quoting POPR, 26). But as noted *supra* §I.A, the claims do not require a mapping be stored "in the normalized variable data database"; the claims require the method step of "*mapping*" to accomplish a certain result, namely "*linking computer-readable field identifiers of the plurality of sites or applications*," "*using*" a database representing a UVM. EX1001, 22:21-28.

Additionally, for both parts of [1C], the Board's finding was based on the fact that in Halevy's "form database," fields from different websites are mapped to the same SO-property, but not directly mapped to each other like in the Table 1 example. *See*, *e.g.*, DI, 26 ("Halevy does not teach or suggest mapping or linking different keywords to one another, ***rather*** the keywords are mapped to SO-properties."), 28 ("Halevy teaches that fields in different forms are mapped to SO-properties… not to each other."), 4-5 (discussing the "normalized variables" shown in the Table 1 example). Yet as discussed *supra* §I.A, the ***claim*** does not require

storage of any direct mapping of fields to each other, whether "'in the normalized variable data database'" (DI, 27 (quoting POPR, 26)) or elsewhere. This purported requirement is found only in the specification's "non-limiting" Table 1 example, which cannot limit the claim despite PO's clear disavowal. EX1001, 9:66-67; *Dealertrack*, 674 F.3d at 1327.

Furthermore, when analyzing [1C(ii)], the Board contrasted Halevy to the "detailed description in the '378 patent regarding the mapping and linking of variables" that uses "mini-integrations or handshakes" and "heuristics," even though the ***claim*** makes no mention of "mini-integrations" or "handshakes" or "heuristics." DI, 30. Certain ***dependent claims***, *e.g.*, claim 5, mention "heuristic patterns" (EX1001, 23:12-15), but the inclusion of such detail only in the dependent claims confirms that the above-discussed "detailed description in the '378 patent" that the Board noted (DI, 30) does not limit claim 1. *See*, *e.g.*, *InterDigital Commc'ns, LLC v. Int'l Trade Comm'n*, 690 F.3d 1318, 1324 (Fed. Cir. 2012) ("The doctrine of claim differentiation is at its strongest in this type of case, where the limitation that is sought to be read into an independent claim already appears in a dependent claim.") (internal quotation marks omitted).

C. The Board Overlooked Petitioner's Reliance on Belanger and Halevy in Combination

The Board's analysis of [1C] also misapprehended that the Petition's ground was based on Halevy in combination with Belanger for this claim element, rather than on Halevy alone. *See* Petition, 13.

The Board only discussed the references in isolation to conclude that Limitation [1C] was not met. For instance, in discussing [1C(i)], the Board extensively discussed the fact that Halevy's disclosed mapping of form fields to SO-properties is used to search for forms, and then concluded based on this intended use that Halevy's form database does not meet [1C(i)]. *See*, *e.g.*, DI, 24-26 (discussing Halevy's use for "lookup of forms of interest through a structured query in the form database" and then concluding that "Halevy does not teach or suggest mapping or linking different keywords to one another, rather the keywords are mapped to SO-properties"). Then, in discussing [1C(ii)], the Board said, "Halevy does not teach or suggest—mapping and linking fields (or field identifiers) to one another across different websites." DI, 28. The Board also stated that Belanger requires creating promotional links manually, and then said that "[c]onsistent with both Belanger, the '378 patent disclosure, and Dr. Malek's testimony, we agree with Patent Owner that claim 1 requires more than 'relating common variables across forms or websites' (*see* Sur-Reply 2) because even with

manual coding, variables or parameters had to be set up and integrated across websites." DI, 30-31.

The Board's discussions of Halevy and Belanger in isolation misapprehend that the Petition's grounds were based on Halevy ***in combination with*** Belanger. In the combination, Halevy's form-crawling process collects the identifiers of fields on the car-rental website and third-party travel/attraction websites disclosed in Belanger; these identifiers, which are *computer-readable field identifiers*, are stored in Halevy's "form database." Petition, 42-44. Identifiers from different websites are linked to the same "SO-property" in the "form database"; thus, the "SO-properties" are *normalized variables*, and the form database is a *normalized variable database, the normalized variable database representing a UVM*. Petition, 47-50. By *using* the form database's linking of different fields from the same website to the same "SO-property," Belanger/Halevy performs the required *mapping* of *field identifiers to one another*, where this *mapping* accomplishes *linking computer-readable field identifiers of the plurality of sites or applications* through the commonly-linked "SO-property." Petition, 46-49. Thus, it is the ***combination*** that provides what "claim 1 requires" (DI, 31), including "*automatically programmatically generating a deep-linked ad*" as Limitation [1D] requires, instead of generating the ad manually. *See* Petition, 50-52.

II. CONCLUSION

For the foregoing reasons, Petitioner requests that the Board grant rehearing and institute trial.

Respectfully submitted,
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Date: May 27, 2025

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CERTIFICATE OF SERVICE UNDER 37 C.F.R. § 42.6 (e)(4)

I certify that on May 27, 2025, a copy of the foregoing document, including any exhibits filed therewith, is being served via electronic mail, as previously consented to by Patent Owner, upon the following:

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