

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

METARAIL, INC.,
Patent Owner.

IPR2024-01272
Patent 10,152,734 B1

Before STACEY G. WHITE, FRANCES L. IPPOLITO, and
BRIAN P. MURPHY, *Administrative Patent Judges*.

MURPHY, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Google LLC (“Petitioner”) filed a Petition pursuant to 35 U.S.C. § 311 requesting institution of *inter partes* review of claims 1–20 of U.S. Patent No. 10,152,734 B1 (Ex. 1001, “the ’734 patent”). Paper 2 (“Pet.”). Metarail, Inc. (“Patent Owner”) timely filed a Patent Owner Preliminary Response. Paper 6 (“Prelim. Resp.”).

We have jurisdiction under 35 U.S.C. § 314, which provides that an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” Under § 314, the Board may not institute review on fewer than all claims challenged in the petition. *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018). If the Board institutes a review, it will institute “on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.108(a). Upon consideration of the Petition, the Preliminary Response, Reply, Sur-Reply, and the evidence of record, for the reasons set forth below, we conclude Petitioner does not demonstrate a reasonable likelihood that it would prevail in showing the unpatentability of at least one challenged claim of the ’734 patent. Accordingly, we do not institute an *inter partes* review of claims 1–20 of the ’734 patent.

A. *Real Parties in Interest and Related Matters*

Petitioner, Google LLC, identifies itself as the real party in interest. Pet. viii. Petitioner also notes that “Google LLC is a subsidiary of XXVI Holdings Inc., which is a subsidiary of Alphabet Inc.,” and “XXVI Holdings Inc. and Alphabet Inc. are not real parties-in-interest to this proceeding.” *Id.*

at viii n.1. Patent Owner, Metarail, Inc., identifies itself as the real party in interest. Paper 5, 2.

The parties identify *Metarail, Inc. v. Google LLC*, Case No. 1:23-cv-01116 (D. Del.) as a related matter. Pet. viii; Paper 5, 2. The parties also identify *Google LLC v. Metarail, Inc.*, IPR2024-01269 (challenging U.S. Patent No. 10,789,626), *Google LLC v. Metarail, Inc.*, IPR2024-01270 (challenging U.S. Patent No. 9,633,378), and *Google LLC v. Metarail, Inc.*, IPR2024-01271 (challenging U.S. Patent No. 10,262,342) as related matters. Pet. viii; Paper 5, 2. In addition, Petitioner identifies U.S. Patent Application No. 16/933,053 as a related matter. Pet. viii.

B. The '734 Patent

The '734 patent is titled “Systems, Methods and Computer Program Products for Mapping Field Identifiers From and to Delivery Service, Mobile Storefront, Food Truck, Service Vehicle, Self-Driving Car, Delivery Drone, Ride-Sharing Service or In-Store Pickup for Integrated Shopping, Delivery, Returns or Refunds.” Ex. 1001, code (54). The invention “relates generally to the field of online advertising and E-commerce” and, “[m]ore particularly, . . . to deep-linked advertising and E-commerce.” *Id.* at 1:38–41. The '734 patent discloses that for search and E-commerce sites, “[a] recent advancement in Digital Advertising has been ‘deep-linked’ or ‘parameter-based’ advertising.” *Id.* at 2:51–52. The patent further states that this form of advertising applies “where the user is searching for a product or service, like a travel site, and types in search parameters, such as where s/he is traveling from, where to, travel dates, how many people in the party, class of travel, etc.” *Id.* at 2:52–57. In deep-linking, these search

parameters are passed to the advertiser and the advertiser uses these parameters to:

- (a) hyper-target the placement of ads and customize the copy of ads presented on targeted web pages, and (b) automatically activate searches from their home page, thereby landing the web user “deep” into their booking process rather than on their home page as is customary with other forms of ad clicks.

Id. at 2:57–65. Such deep-linked ad connections are conventionally achieved by manually creating “programmatic integrations” between variables, fields, etc., of different websites, e.g., a publisher site and advertiser site. *Id.* at 3:14–23.

The '734 patent describes systems and methods to automate the generation of deep-linked ads. *Id.* at 3:51–62, 4:6–15, 4:56–58. Figure 2 of the '734 patent, reproduced below, depicts exemplary system architecture 200 for automatically generating a deep-linked ad.

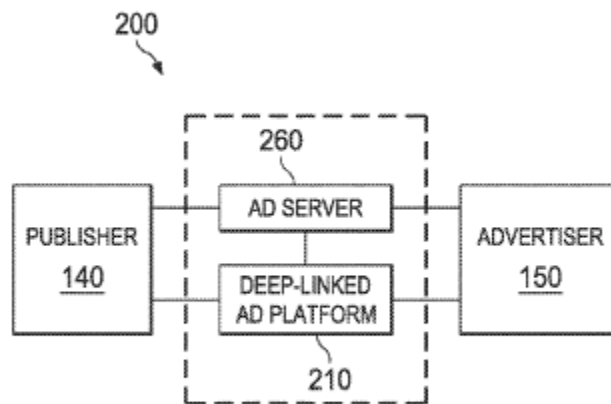


FIG. 2

In Figure 2, system architecture 200 includes deep-linked ad platform 210 and ad server 260. *Id.* at 8:35–44.¹ Ads for advertiser 150 are prepared by

¹ Quotations from patent documents may omit or de-emphasize bold numerals.

ad server 260 and served to publisher 140. *Id.* The ad server and deep-linked ad platform automatically generate deep-linked ads for the publisher 140. *Id.* In operation, this deep-linking method may include “creating and maintaining a universal map of variables and identifiers from sites . . . [and] automatically generating deep-linked ads from the variables and identifiers and other data in the universal variable map” to present deep-linked ads to consumers in real time. *See id.* at 9:3–8, Fig. 3. The ’734 patent discloses “one or more spiders/scrapers or data gathering modules” may interact with websites and applications to obtain information about the variables or identifiers on the websites. *Id.* at 9:45–51.

The ’734 patent further discloses:

In addition to utilizing data crawlers . . . , user responses to ads can be used to populate field identifiers which can then be deep-linked into more ads. That is, field identifiers obtained from a certain data source can be mapped to those at a certain data target such that a physical product or service may be presented to a user (through a user interface on the user’s device) based on their interaction with a deep-linked ad that links the data source and the data target, even if there is no pre-existing relationship between the data source and the data target.

Id. at 9:61–10:5. The ’734 patent describes an example of a user on a mobile app indicating an interest in ordering pizza:

[F]ield identifiers obtained from the app . . . can be dynamically mapped to field identifiers obtained from a pizzeria. In real time, a deep-linked ad can be automatically generated using the universal map disclosed herein. This deep-linked ad links the app . . . field identifiers to the pizzeria field identifiers . . . and passes field identifier values (which can contain dynamic data such as the user’s input to the app . . .) through the app [] field identifiers mapped to the pizzeria field identifiers.

Id. at 10:5–19; *see also id.* at 3:10–13 (“fields or variables on the publisher site or mobile app need to be mapped and integrated with corresponding

fields or variables on the advertiser site or mobile apps, and the ad click sent to the appropriate dynamic page URL”). The universal variable map associates the forms and fields from one site with one or more relevant forms and fields on different sites. *Id.* at 5:65–6:1. The use of such mapping and integration can “take a web site visitor from an initial stop (e.g., a home page of a first web site) directly and in real-time through a specific deep-link ad to a landing spot on another site (e.g., a checkout page of a second web site).” *Id.* at 6:2–7.

The ’734 patent further provides an example of a travel web site where the spidering module has crawled the page, parsed the Form section of the page, and associated form fields with normalized variables in a universal variable map. *Id.* at 12:44–66. Table 1 (reproduced below) shows the data fields from three websites that are associated with normalized variables. *Id.*

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	...	...	...	...	...
...	...	...	...	...	...

In Table I, each website uses different nomenclature for Variable 1 (“Orig,” “Depart_City,” and “From”) and Variable 2 (“Dest,” “Arrival_City,” and “To”). *Id.* The universal variable map associates “orig,” “Depart_City,” and “From” with normalized variable “from,” and associates “Dest,” “Arrival_City,” and “To” with normalized variable “to.” *Id.*

The claimed method employs “a series of mapping heuristics” or processing rules that create the “mini-integrations or handshakes between each gathered variable and the corresponding normalized variable” in the universal variable map. *Id.* at 5:9–14; 16:28–46. When a website user inputs dynamic data via a user interface, the universal variable map allows the dynamic data variables to be normalized, integrated, and “linked to explicit variables on the advertising site, thereby passing all requisite dynamic data . . . into the right multiple fields in the right locations on the advertiser site,” i.e., automatically providing a deep-linked ad on an advertiser’s website. *Id.* at 5:45–52. Thus, the universal variable map and processing rules provide an automated, parameter-based form of hyper-targeted digital advertising that avoids the need to manually code the linkages, while passing a site visitor’s input parameters along with each ad click to the appropriate advertiser site.

The ’734 patent describes the use of a “universal variable map,” via which “forms and fields from one site can be associated with one or more relevant forms and fields from one or more different sites.” *Id.* at 5:65–6:1. Figure 11A of the ’734 patent is reproduced below.

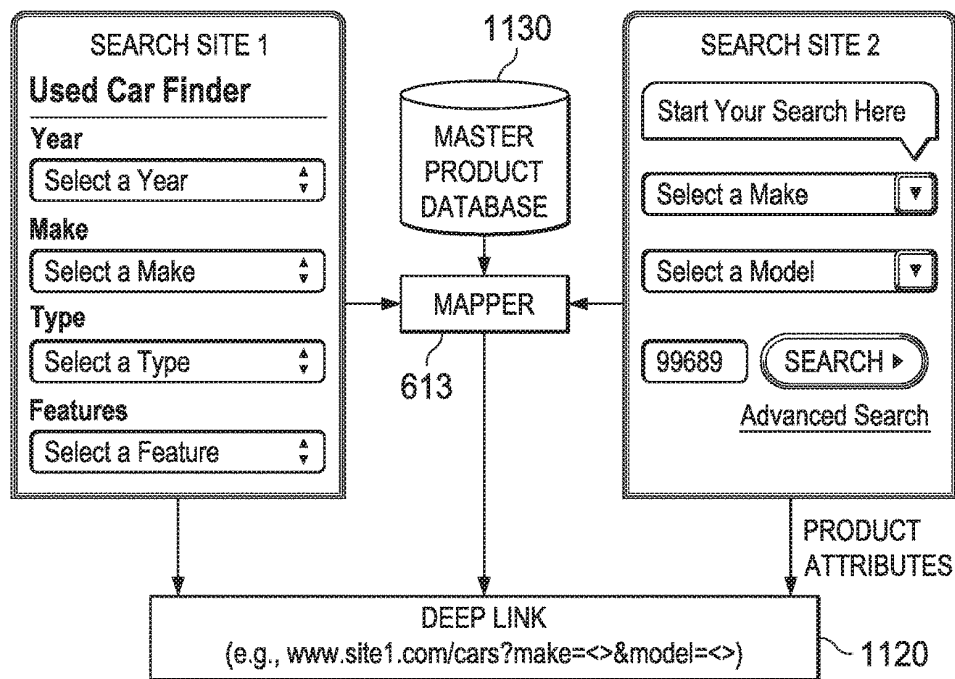


FIG. 11A

Figure 11A depicts exemplary “linkages built in an automated fashion between two sites.” *Id.* at 7:38–40.

The '734 patent explains:

In the example of FIG. 11A, Search Site 2 is to present to its visitors a deep-linked ad for Search Site 1. Mapper 613 may access universal variable map or variable database 530 or product attribute library 807 or master product database 1130 (which implements one embodiment of a universal variable map), cross reference programming variables used by Search Site 2 with those used by Search Site 1, and automatically create a deep-linked ad (deep link 1120 in this example). Deep link 1120 may then be placed on Search Site 2. When a user selects (either explicitly or implicitly) deep link 1120 on Search Site 2, the user's browser is automatically directed to a network address indicated by deep link 1120 (“www.sitel.com/cars?make=<>&model=<>” in this example, where “make” and “model” represent mapped field identifiers). A form at the network address on Search Site 1 may be pre-populated with field identifier values (in this example, product

attributes such as “Toyota” and “Prius”), along with any user input provided at Search Site 2.

Id. at 16:61–17:11.

C. Illustrative Claim

Claims 1, 8, and 15 are the independent claims. Claim 1, reproduced below, illustrates the claimed subject matter:

1. [1PRE]² A method, comprising:

[1A] in response to a user interacting with a user interface of a networked data source on a user device, accessing a universal variable data database, the *universal variable data database representing a universal variable map* of searchable classes and attributes of products or services on the Internet, the accessing performed by a computer having a processor and a non-transitory computer-readable medium, the universal variable data database maintained by the computer;

[1B] *determining*, by the computer based on dynamic data collected through the user interface while the user is interacting with the user interface of the networked data source, *field identifiers of the networked data source stored in the universal variable data database*, the dynamic data containing user-specified values pertaining to a product or service;

[1C] *determining*, by the computer, *field identifiers of a networked data target that are mapped to the field identifiers of the networked data source in the universal variable data database*;

[1D] automatically generating, by the computer using the universal variable data database, a deep-linked ad that links the field identifiers of the networked data source and the field identifiers of the networked data target;

² We adopt Petitioner’s claim limitation numbering system for convenience.

[1E] presenting the deep-linked ad through the user interface of the networked data source on the user device; and

[1F] responsive to the user selecting the deep-linked ad through the user interface of the networked data source on the user device, passing the user-specified values pertaining to the product or service to the networked data target using the deep-linked ad that links the field identifiers of the networked data source and the field identifiers of the networked data target such that, without necessitating any pre-existing relationship between the networked data source and the networked data target, an electronic product or service order form at the networked data target is automatically filled in or acted upon with the user-specified values pertaining to the product or service and presented on the user device.

Ex. 1001, 25:21–60 (emphases added).

D. Asserted Grounds of Unpatentability

Petitioner asserts that claims 1–20 are unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §³	References/Basis
1–5, 8–12, 15–19	103(a)	Oldham, ⁴ Halevy ⁵
1–5, 8–12, 15–19	103(a)	Oldham, AAPA, ⁶ Halevy
6–7, 13–14, 20	103(a)	Oldham, Halevy, Rousso ⁷
6–7, 13–14, 20	103(a)	Oldham, AAPA, Halevy, Rousso

³ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011), amended 35 U.S.C. § 103, effective March 16, 2013. Because the challenged claims of the ’626 patent have an apparent effective filing date before March 16, 2013, the pre-AIA version of § 103 applies.

⁴ US Pub. 8,150,979 B1, Apr. 3, 2012 (Ex. 1020, “Oldham”).

⁵ US Patent Pub. No. 2006/0230033 A1, Oct. 12, 2006 (Ex. 1006, “Halevy”).

⁶ Applicant Admitted Prior Art (“AAPA”).

⁷ US Patent Pub. No. 2010/0057556 A1, Mar. 4, 2010 (Ex. 1021, “Rousso”).

II. CLAIM CONSTRUCTION

A. *Level of Ordinary Skill in the Art*

Petitioner submits that a person of ordinary skill in the art (“POSITA”) “would have had a bachelor’s degree in computer science or a related field, and at least two years of experience with web-programming and search engine systems.” Pet. 8 (citing Ex. 1003 ¶ 32). Petitioner further contends that “[m]ore education could substitute for experience, and vice versa” and “[t]his person would have been capable of understanding and applying the teachings of the ’734 patent and the prior-art references discussed herein.” *Id.* Patent Owner states that, “[f]or purposes of this preliminary response, Patent Owner and its expert apply this definition, as the Petition fails under any definition of a POSITA.” Prelim. Resp. 9 (citing Ex. 2001 ¶¶ 35–36).

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citing *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986)). “These factors are not exhaustive but are merely a guide to determining the level of ordinary skill in the art.” *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F.3d 1254, 1256 (Fed. Cir. 2007). There is uncontested evidence in the record before us that reflects the knowledge and experience of a POSITA.

For purposes of this Decision, we adopt the level of ordinary skill in the art described in the Petition and applied in the Preliminary Response,

which is consistent with the description in the '626 patent and the prior art of record.

B. Claim Construction

The parties do not assert any claim constructions at this stage. Pet. 8–9; *see generally* Prelim. Resp. In an *inter partes* review we apply the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b). In applying this standard, we generally give claim terms their ordinary and customary meaning as would be understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc). For purposes of this Decision, we need not expressly construe any claim terms. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that “we need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

III. OBVIOUSNESS ANALYSIS

A. Asserted Obviousness of Claims 1–5, 8–12, and 15–19 over Oldham and Halevy (Ground 1)

Petitioner contends that independent claims 1, 8, and 15 and dependent claims 2–5, 9–12, and 16–19 of the '734 patent would have been obvious over Oldham in view of Halevy under 35 U.S.C. § 103 (Ground 1). Pet. 9–50 (citing Ex. 1003 ¶¶ 48–134). The Petition asserts Oldham teaches systems and methods for serving deep-linked advertisements to a user based on the user’s search query and attributes (e.g., the user’s geographic location). *Id.* at 9 (citing Ex. 1020, 6:40-54). The Petition, however,

acknowledges that Oldham teaches manual coding of advertiser URLs in “predetermined formats” required by Oldham’s external search engine, rather than teaching a “*universal variable data database*” (“*universal variable map*”) as recited in claim 1. *Id.* at 13–14 (citing Ex. 1003 ¶¶ 49–51; Ex. 1020, 9:39–51, 9:55–58). The Petition, therefore, asserts that combining Oldham and Halevy teaches, suggests, or otherwise renders obvious a system that uses “*a universal variable database representing a universal variable map*” to determine “*field identifiers of a networked data target that are mapped to the field identifiers of the networked data source [stored] in the universal variable data database*”.⁸ *Id.* at 27–36 (citing Ex. 1003 ¶¶ 88–107). The Petition further argues a POSITA would have been motivated to combine Oldham and Halevy in the manner claimed in the ’734 patent with a reasonable expectation of success. *Id.* at 22–26 (citing Ex. 1003 ¶¶ 71–80).

Patent Owner contends Petitioner has failed to meet its burden to show a reasonable likelihood that at least one of the challenged claims in Ground 1 is unpatentable over Oldham and Halevy. Prelim. Resp. 1–2, 16–25 (citing Ex. 2001 ¶¶ 58–71). Patent Owner argues that the combination of Oldham and Halevy does not disclose, teach, suggest, or otherwise render obvious the “*universal variable data database*” (“*universal variable map*”) limitations recited in claim 1. *Id.* at 16–24 (citing Ex. 2001 ¶¶ 61–70). Patent Owner argues, in particular, that the Petition does not identify “*field identifiers*” in Oldham’s external engine (asserted “*networked data source*”) or the recited mapping of “*field identifiers of a networked data target . . . to the field identifiers of the networked data source*” when Oldham is combined

⁸ Recited in claim elements [1A], [1B], and [1C].

with Halevy. *Id.* Patent Owner, therefore, maintains that Petitioner has not met its burden of establishing a reasonable likelihood that Oldham and Halevy would have rendered the challenged claims obvious to a POSITA.

“In an *inter partes* review, the burden of persuasion is on the petitioner to prove ‘unpatentability by a preponderance of the evidence,’ 35 U.S.C. § 316(e), and that burden never shifts to the patentee.” *In re Magnum Oil Tools Int’l Ltd.*, 829 F.3d 1364, 1375 (Fed. Cir. 2016) (quoting *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015)); *see also Aqua Products, Inc. v. Matal*, 872 F.3d 1290, 1306 (Fed. Cir. 2017 (en banc (quoting *Magnum Oil*))).

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting 35 U.S.C. § 103(a)). Obviousness is resolved based on underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of nonobviousness, i.e., secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). A party who petitions the Board for a determination of obviousness must show that “a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.” *Procter & Gamble Co. v. Teva Pharms.*

USA, Inc., 566 F.3d 989, 994 (Fed. Cir. 2009) (quoting *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1361 (Fed. Cir. 2007)).

We assess Petitioner’s evidence and argument according to the above-referenced standard. For the reasons given below, we determine Petitioner has not established that Oldham and Halevy disclose, teach, suggest or otherwise render obvious independent claims 1, 8, and 15 of the ’734 patent. We begin with a discussion of Oldham and Halevy.

1. *Oldham (Ex. 1020)*

Oldham discloses systems and methods for serving advertisements to a user based on user search queries and user attributes, including the user’s geographic location. Ex. 1020, 6:40–54. Oldham’s system includes an “external engine” connected to a network (e.g., the Internet), and users interact with Oldham’s system via a webpage displayed on a web browser (e.g., desktop computer, laptop, smartphone, PDA, etc.). *Id.* at 4:35–46. Oldham’s Figure 1 is reproduced below.

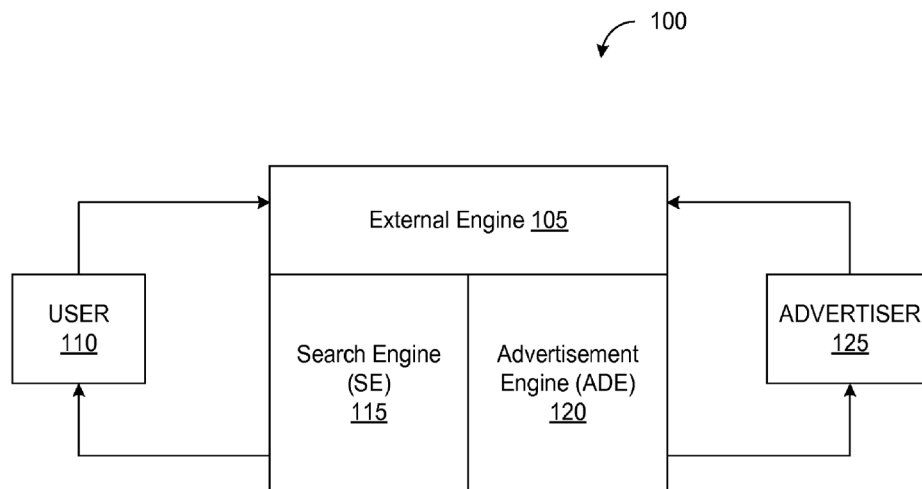


FIG. 1

Figure 1 is a block diagram of a system for capturing user attributes to provide to an advertiser. *Id.* at 4:20–21.

In Figure 1, external engine 105 includes a search engine (SE) 115 and an advertisement engine (ADE) 120 that both return results (e.g., search results and advertisements) based on search query keywords entered by user 110. *Id.* at 4:46–48, 4:63–5:2. Oldham states that “SE 115 can be configured to search the network, e.g., the internet, for information, products, and services of interest to a user 110 based on search criteria provided by the user 110.” *Id.* at 4:48–51. “ADE 120 can be configured to receive advertisements from a second system,” which “can be associated with one or more advertisers 125.” *Id.* at 4:51–54. Oldham states that “external engine 105 can be configured to present, to a user 110, the advertisements received from the advertisers 125.” *Id.* at 4:54–56.

Oldham’s Figure 2 is reproduced below.

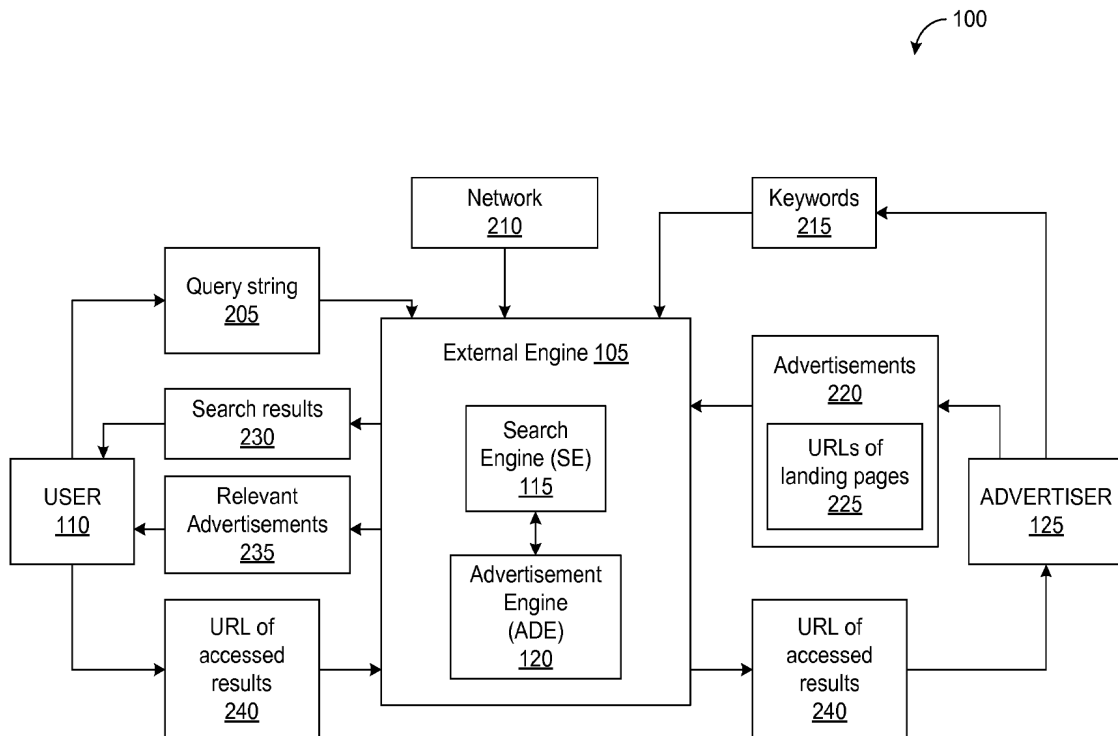


FIG. 2

Figure 2 is a block diagram illustrating inputs and outputs for capturing attributes of user 110 to provide to advertiser 125. *Id.* at 4:22–24, 5:39–41.

Oldham explains that “external engine 105 can be configured to receive search queries from a user 110, find information (e.g., on the internet) that are relevant to the user's search query, present the information to the user 110 and, in addition, present to a user 110 advertisements relevant to the user's search query.” *Id.* at 5:41–46. For example, “user 110 can provide search criteria in the form of a query string 205” that “can include one or more keywords and/or key phrases that are pertinent to the topic in which a user 110 is interested.” *Id.* at 5:53–56. Oldham further discloses that advertisers provide landing page URLs to the advertisement engine (ADE). *Id.* at 9:24–26. These “received URLs” conform to a syntax both “designed to receive one or more user attribute values” and “designed to comply with pre-determined formats.” *Id.* at 9:48–51. The received URLs are manually coded by the advertisers “to manually provide a compliant URL for each advertisement to benefit from the external engine’s generated deep-links with inserted user parameter values.” Ex. 1003 ¶ 49 (citing Ex. 1020, 9:24–58).

2. *Halevy (Ex. 1006)*

Halevy “relates to . . . searches through content on websites” that may be hidden behind web-based forms and, “[m]ore specifically, . . . searching through content . . . accessible th[r]ough queries entered into web-based forms.” Ex. 1006, ¶¶ 3, 8. Halevy states that data available on the web but “hidden behind web-based forms” are not “searchable by traditional search engines.” *Id.* ¶ 5. Halevy uses a “form engine” that engages in a web-crawling process to collect information about websites with web-based forms and stores the collected information in a “form database.” *Id.* ¶¶ 34–35. When a system user inputs a keyword search query, Halevy’s form

engine accesses the data stored in the form database to identify relevant forms and return a list of forms to the user along with “query-links” to the corresponding forms. *Id.* ¶¶ 36, 136–138.

Halevy Figure 1, reproduced below, depicts a “form engine” that facilitates such web-based form searching.

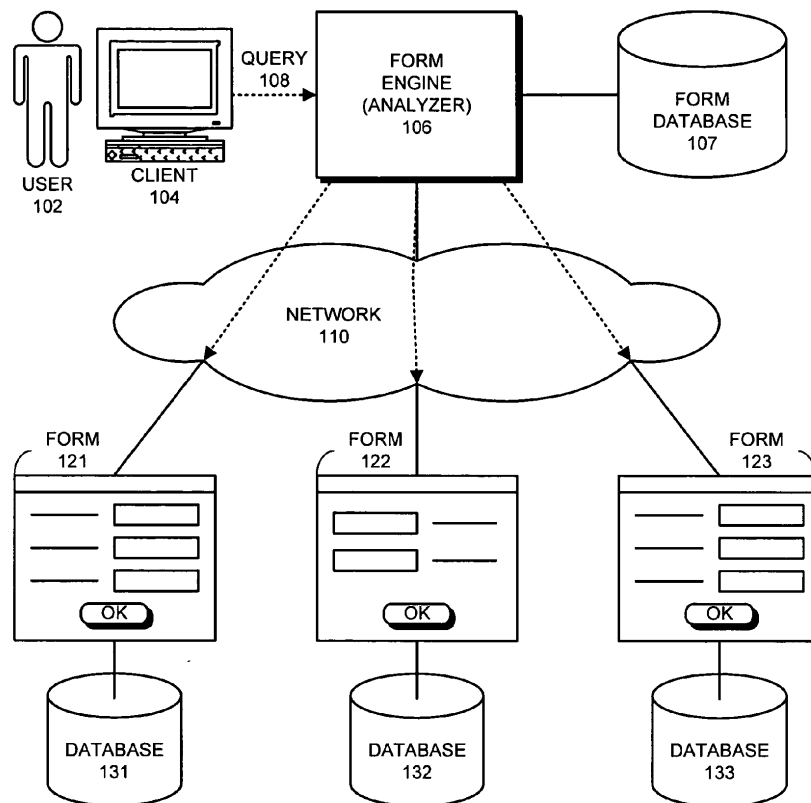


FIG. 1

Figure 1 depicts form engine 106 that facilitates searching through web-based forms. *Id.* ¶¶ 26, 34. Halevy discloses that

form engine 106 includes a set of tools that *facilitate constructing a search engine for the "deep web."* The deep web refers to the part of the web that *hides behind forms* and is therefore *not accessible to traditional search engines*. With these tools, both a general-purpose search engine, and domain-specific engines that focus on certain topics, may be constructed.

Id. ¶ 37 (emphases added). In operation, user 102 sends keyword query 108 to Form Engine 106. *Id.* ¶ 36. In response, Form Engine 106 “accesses a number of forms 121–123 which are hosted on servers located throughout network 110.” *Id.* ¶ 35. Halevy’s crawling process “creates database entries for the identified forms” of interest by “storing metadata describing the identified forms” in the form database, which facilitates subsequent searching of the database. *Id.* ¶¶ 9, 35. The stored metadata includes data describing the “input fields” on the form, such as a field’s “parameter name,” “text,” “field types,” and “exemplary values.” *Id.* ¶¶ 16, 37, 44, Fig. 2.

Halevy’s system classifies each form in the database to indicate “the types of objects that can be obtained by querying the form,” such as “books, hotels, restaurants . . . houses, jobs, and cars for sale.” *Id.* ¶¶ 45, 57. Halevy refers to the form classifications as “SO-classes” (search ontology classes). *Id.* ¶ 38, Fig. 6. The SO-classes are organized in a hierarchy, wherein each SO-class is associated with “SO-properties” (search ontology properties) that represent the type of information to be obtained from searching the form fields (e.g., parameter names and values). *Id.* ¶¶ 38, 48, 66. For example, if a form’s “SO-class” is identified as “car,” then the form fields are mapped to the SO-properties for the car class, such as the make and model of a car. *Id.* ¶¶ 49, 95, 98–101. These SO-classes and associated SO-properties are used to identify forms in the database that are relevant to a user’s keyword search query. *Id.* at ¶¶ 136–138.

Halevy’s system maps the form fields to the SO-properties of a given class, as depicted in highlighted Figure 3 reproduced below from the Petition.

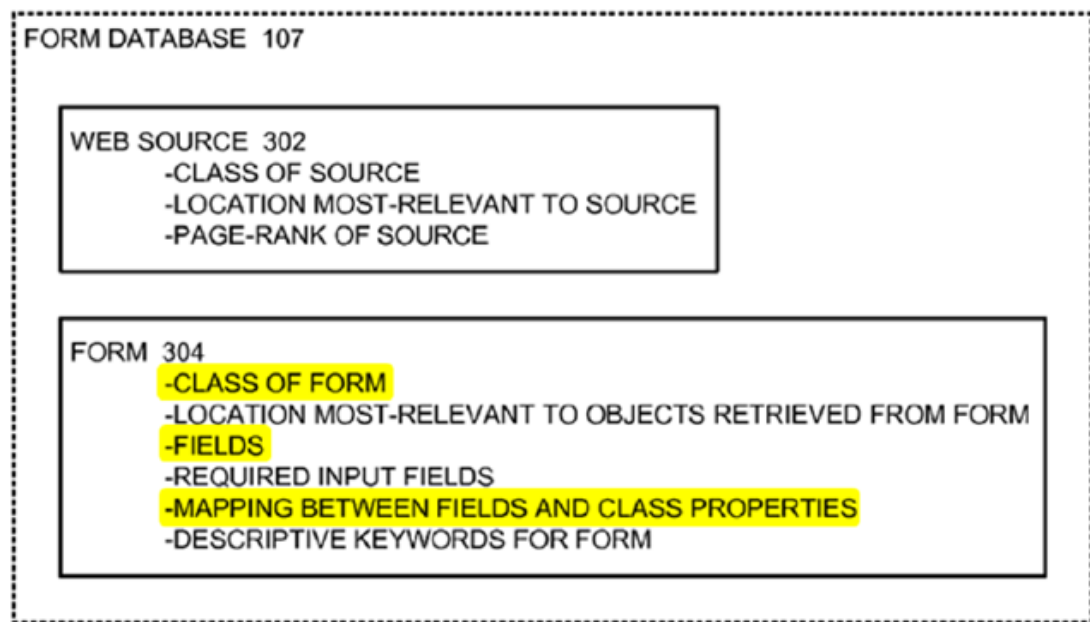


FIG. 3

Pet. 18. As shown in Figure 3, separately for each form in the database, Halevy's system stores the identified class of the form, data for each form field (including the parameter name), and the mapping of fields on the form to the corresponding SO-properties of that form's class. Ex. 1006 ¶¶ 43–49, 67, 125. The class and properties identified for each form are then used to “facilitate searches through content which is accessible through” the forms. *Id.* ¶ 9; *see also id.* ¶¶ 136–138, Fig. 2.

Halevy further discloses a search operation where a user inputs a query containing keywords. *Id.* ¶¶ 18, 136. A “query analyzer can be adapted to consider keyword queries from a user and to predict the SO-class in the ontology that is most relevant to the query.” *Id.* ¶ 89. For example, “the query ‘used Acura Integra’ is most likely referring to Cars” as the relevant SO-class. “[O]nce an SO-class has been predicted for a user query, a structured query is constructed by mapping the individual words in the

query to properties of the chosen search class.” *Id.* ¶ 112. “Using this information, the query description module tries to match each word in the user query to the most likely search class property.” *Id.* Halevy’s system then “performs a lookup based on the structured query in the form database to identify forms of interest.” *Id.* ¶¶ 18, 136–137. The system also ranks the forms returned by the lookup and “then presents the user with query-through links to the ranked forms of interest” that allows the user to click on a specific link “to submit a query to the associated form of interest.” *Id.* ¶¶ 137–138.

3. *Analysis of Claim 1 in View of Oldham and Halevy*

The Petition contends that Oldham teaches the use of time-intensive manual coding to conform advertiser URLs to “pre-determined formats” necessary for the external engine to insert user attribute values, such as location, into an advertiser’s URL. Pet. 13–14, 23. For example, an advertiser may provide a manually coded URL in the predefined format “www.advertiser.com/<insert city value here>.html” so that the external engine can insert the user’s city parameter in the URL, *e.g.*, www.advertiser.com/city=MountainView.html.” Ex. 1020, 9:39–48. The Petition, therefore, attempts to combine Oldham’s external engine, which discloses and teaches manually-coded ad URLs, with Halevy’s form engine and database.

The Petition asserts that Halevy’s system provides a universal variable “mapper” that “automatically maps fields on forms from different websites to a shared set of identifiers (i.e., ‘properties’) determined from the form data, thereby mapping corresponding *fields across various website forms to each other.*” *Id.* at 15 (citing Ex. 1003 ¶ 54; Ex. 1006 ¶ 37, Fig. 2)

(emphasis added). The Petition relies on this crucial assertion for its argument that a modified Oldham-Halevy system would have rendered claim 1 of the '734 patent obvious to a POSITA. Based on our review of the record evidence, we determine the Petition has not adequately established that Halevy, or the combination of Oldham and Halevy presented in the Petition, discloses, teaches, suggests, or otherwise renders obvious a universal variable mapper that maps corresponding form fields (*“field identifiers”*) across various website forms to each other.

We begin with an analysis of claim elements [1B] and [1C].

a. The “networked data source” and “networked data target” limitations of claim elements [1B] and [1C]

Claim element [1B] recites the method step of *“determining, by the computer based on dynamic data collected through the user interface while the user is interacting with the user interface of the networked data source, field identifiers of the networked data source stored in the universal variable data database . . .”* Ex. 1001, 25:31–35.⁹ Claim element [1B] provides that dynamic data entered by a user on a networked data source, e.g. a search query on a website, is used to determine field identifiers of the search results generated by the user’s search query. For example, the claimed method uses a search query to determine the field identifiers of a travel web site or mobile food ordering app presented by the user interface of the networked data source. *Id.* at 9:61–10:24. The determined field identifiers are stored in

⁹ Independent claims 8 and 15 include virtually the same language. *Id.* at 26:35–39 (claim 8), 27:34–38 (claim 15). Claim element [1A] and corresponding limitations in claims 8 and 15 also recite a *“universal variable data database representing a universal variable map of searchable classes and attributes of products or services on the Internet.”* Ex. 1001, 25:24–27.

the universal variable data database (universal variable map). *Id.* at 16:37–52, 17:26–35.

Claim element [1C] recites a second step of “*determining, by the computer, field identifiers of a networked data target that are mapped to the field identifiers of the networked data source in the universal variable data database [universal variable map].*” *Id.* at 25:38–41. Claim element [1C] provides that field identifiers of a separate networked data target, e.g., a travel promotion advertisement or a pizzeria’s online order menu, are mapped to the stored field identifiers of the networked data source (element [1B]) in order to generate a deep-linked ad automatically in response to the user’s interaction with the networked data source. *Id.* at 9:61–10:19 (“field identifiers from a certain data source can be mapped to those at a certain data target such that a physical product or service may be presented to a user . . . based on their interaction with a deep-linked ad that links the data source and the data target”). In short, the “*universal variable data database*” (“*universal variable map*”) maps the field identifiers generated on one site or app based on a user’s input—a “*networked data source*”—to the field identifiers on another site or app that may be of interest to the user—a “*networked data target*.” *Id.*; *see also id.* at 5:65–6:1 (“through the universal variable map, forms and fields from one site can be associated with one or more relevant forms and fields from one or more different sites”).

The Petition contends that Oldham’s external engine is the recited “*networked data source*” in element [1B], where a user inputs a search query to return search results. Pet. 32–33 (“Oldham’s external engine (i.e., ‘*the networked data source*’) running on its system (i.e., ‘*the computer*’) receives a search query (i.e., ‘*dynamic data*’) from a user via a webpage served by the

external engine (i.e., ‘*the user interface of the networked data source*’))” (citing Ex. 1003 ¶ 98; Ex. 1020, 5:11–15). The Petition further contends that Halevy’s form engine provides the “*the field identifiers of a networked data target*” recited in element [1C]. *Id.* at 35 (citing Ex. 1003 ¶¶ 104–105; Ex. 1006, 67, 136–138). The Petition then makes the conclusory assertion that:

in Oldham/Halevy, the user’s search query is submitted to Halevy’s form engine (via Oldham’s modified external engine) to retrieve deep-links from the form database (i.e., “*the universal variable data database*”), with keywords in the user’s query mapped to corresponding field parameter names in each deep-link.

Id. at 33 (citing Ex. 1003 ¶ 100; Ex. 1006 ¶¶ 36, 136–138) (underlining added).

The above quoted contention refers to mapping the “keywords” of a user query in Oldham’s external engine (the asserted “*networked data source*”), rather than identifying and mapping “*field identifiers*” of Oldham’s external engine. The Petition also does not identify “*field identifiers*” of Oldham’s external engine (the “*networked data source*”) being stored in Halevy’s form database (“*stored in the universal variable data database*”) as recited in element [1B]. The stored field identifiers from the networked data source in Oldham are needed for mapping to Halevy’s form fields (asserted “*field identifiers of a networked data target*”) as recited in element [1C]. We address each claim element in turn.

i. *Claim element [1B]*

With regard to claim element [1B], Dr. Malek persuasively explains the inconsistencies in the Petition:

While [Dr. Fox] asserts that Oldham's external engine is the required "networked data source," he does not identify any teaching in Oldham that there are any "field identifiers" in Oldham's external engine.

Dr. Fox then goes on to argue that "POSAs would have recognized that the SO-properties mapped to the keywords are *determined 'field identifiers of the networked data source stored in the universal variable data database' based on the dynamic data* because the SO-properties for each class are defined by the form engine and mapped to corresponding fields from various forms stored in the form database." EX1003, ¶ 102.

First, Halevy's SO-properties obviously cannot be "field identifiers" of Oldham's external engine, because Halevy's SO-properties do not come from Oldham's external engine. Rather, they are generated in Halevy's system as part of the "database schema" of Halevy's form database. *See* EX1006, [0038] ("In one embodiment of the present invention, the database describes web sources in terms of an ontology of classes and properties, which is referred to as the 'search ontology' (SO).").

In addition, Halevy's SO-properties are not "field identifiers" at all. Rather, the SO-properties are simply search filters that assist Halevy's search engine in determining a form's degree of relevancy to the user's keyword search query. *See* EX1006, [0137] ("[T]he system performs a lookup based on the structured query in the form database to identify forms of interest (step 608) and ranks these forms (step 610).").

Also I note that Dr. Fox argues elsewhere in his declaration that SO-properties are "normalized variables," which even he recognizes are different from "field identifiers." *See, e.g.,* EX1003, ¶ 101 ("Halevy's form engine determines field identifiers . . . by mapping keywords in the query to SO-properties (i.e., normalized variables) . . ."). As described in the '734 patent, "normalized variables" are used to create associations between field identifiers of different forms, but they are not themselves "field identifiers." *See* EX1001, 15:65-16:3 ("In this way, once a site's category is defined, the variable

mapping exercise can be simplified to match which variables or identifiers match up with which normalized variable . . .”).

Thus, Dr. Fox fails to show any teaching or suggestion in the combination of Oldham and Halevy of the claim limitation “determining . . . field identifiers of the networked data source stored in the universal variable data database.”

Ex. 2001 ¶¶ 59, 61–64 (underlining added). We adopt Dr. Malek’s testimony and reasoning above as our own.

The Petition has not sufficiently identified a teaching of the asserted “*field identifiers of the networked data source*” in Oldham’s external engine, or explained why any such field identifiers would be stored in Halevy’s form database (asserted “*universal variable data database*”). See Prelim. Resp. 16–17 (citing Ex. 2001 ¶¶ 58–59). The omission is particularly stark and incongruous, given that the Petition later asserts for element [1C] (discussed below) that “Halevy’s crawling process maps corresponding fields on multiple website forms (i.e., *field identifiers of networked data targets*) to SO-properties (i.e., normalized variables) of the SO-classes identified for the forms.” Pet. 35 (citing Ex. 1003 ¶ 104; Ex. 1006 ¶ 67). As Dr. Malek explains, SO-properties are not field identifiers from Oldham’s external engine. The Petition does not identify “*the field identifiers of the networked data source*” in Oldham’s system or explain why any such field identifiers would be stored in Halevy’s form data base (“*stored in the universal variable data database*”) for mapping with Halevy’s form field identifiers.

In sum, the Petition is inherently inconsistent and does not adequately explain or support the assertion that the combination of Oldham and Halevy discloses, teaches, suggests, or otherwise renders obvious the step of “*determining . . . field identifiers of the networked data source stored in the universal variable data database*” as recited in claim element [1B].

ii. *Claim element [1C]*

With regard to claim element [1C], “*field identifiers of a networked data target that are mapped to the field identifiers of the networked data source in the universal variable data database,*” the Petition asserts that:

Halevy’s form engine *determines “field identifiers of the networked data source stored in the universal variable data database”* based on the user’s search query (i.e., “*the dynamic data*”) by mapping keywords in the query to SO-properties (i.e., normalized variables) of various forms in an identified SO-class.

and that:

Halevy’s crawling process maps corresponding fields on multiple website forms (i.e., *field identifiers of networked data targets*) to SO-properties (i.e., normalized variables) of the SO-classes identified for the forms.”

Id. at 33–35 (citing Ex. 1003 ¶¶ 101–104; Ex. 1006 ¶¶ 48–49, 62, 67) (underlining added). The above-quoted assertions again improperly equate Halevy’s SO-properties (normalized variables) to “*field identifiers*” from Oldham’s external engine (the asserted “*networked data source*”). As explained above, Halevy’s classified SO-properties are not “*field identifiers*” generated from a user’s search query in Oldham’s “*networked data source,*” even in the asserted combination of a modified Oldham-Halevy system. Moreover, the asserted mapping of query “keywords” to SO-properties does not satisfy the recited mapping between “*field identifiers*” of the networked data source and a networked data target. Thus, the Petition does not establish that field identifiers of Oldham’s external engine (“*field identifiers of a networked data source*”) are stored in Halevy’s form database (“*stored in the universal variable data database*”) and “*mapped*” to the form fields of a class of forms stored in Halevy’s form database (“*field identifiers of a networked data target*”).

Dr. Malek persuasively explains the inconsistencies in the Petition:

First, Dr. Fox asserts that “Halevy’s query process maps the keywords of a user query to the SO-properties (i.e., ‘*field identifiers of the networked data source in the universal variable database*’) in order to return deep-links to the forms with the keywords in the query mapped to corresponding fields of the linked form.” EX1003, ¶ 106. As I previously discussed, Halevy’s SO-properties are not “field identifiers of the networked data source.” But even if they were, the mapping described by Dr. Fox here – mapping between “keywords of a user query to the SO-properties” – is not the required mapping between field identifiers of a networked data target and a networked data source, because keywords of a user query are not “field identifiers.” Rather, they are simply the user’s input into the system. Dr. Fox seems to agree, as he does not contend anywhere in his declaration that the keywords of a user query are “field identifiers.” Instead, he asserts that keywords are “the user-specified values pertaining to the product or service.” *Id.*, ¶ 114 (“The deep-link includes keywords of the query string (i.e., ‘*the user-specified values pertaining to the product or service*’) . . .”).

Ex. 2001 ¶ 67 (underlining added). We adopt Dr. Malek’s testimony and reasoning above as our own. The Petition is inherently inconsistent and does not adequately explain or support the assertion that Halevy’s SO-properties are “*field identifiers of the networked data source*” or that mapping search query keywords to SO-properties would satisfy claim element [1C]:

“*determining . . . field identifiers of a networked data target that are mapped to the field identifiers of the networked data source in the universal variable data database.*”

Dr. Malek’s testimony further explains the Petition’s disconnect with the recited claim language:

Next, Dr. Fox argues that “because Halevy discloses that a single structured query (with keywords of the query mapped to SO-

properties) returns *multiple* query-through links (with keywords mapped to corresponding fields based on the SO-property mapping), POSAs would have understood Halevy's system to map corresponding form fields from different websites to the same SO-properties" EX1003, ¶ 106. Here, Dr. Fox appears to present a different theory that the required mapping between field identifiers of a networked data target and a networked data source is taught in Halevy because, in Halevy's system, form fields of different websites (which presumably would be the networked data target and networked data source) can have the same SO-properties.

In my opinion, the fact that fields in forms for different websites might have the same SO-properties does not mean that the SO-properties are performing any "mapping" between field identifiers of different websites. To the contrary, Halevy does not teach that the SO-properties establish any relationship between different websites. Rather, the SO-properties are simply used by Halevy's search engine to identify forms relevant to the user's keyword search, as shown in the highlighted boxes in Figure 6 of Halevy.

Ex. 2001 ¶¶ 68–69. We again agree with Dr. Malek's testimony and reasoning and adopt it as our own. The Petition presents inconsistent theories for achieving the recited mapping of form fields between two different websites. The Petition does not adequately support the assertion that field identifiers of Oldham's external engine are stored in a universal variable database. Nor does the Petition adequately support the assertion that Halevy's form database maps form fields across websites. We further address Petitioner's inconsistent arguments in the next subsection.

In sum, the Petition is inherently inconsistent and does not adequately explain or support the assertion that the combination of Oldham and Halevy discloses, teaches, suggests, or otherwise renders obvious the step of *"determining, by the computer, field identifiers of a networked data*

target that are mapped to the field identifiers of the networked data source in the universal variable data database,” as recited in claim element [1C].

b. Halevy’s schema-mapping search engine

Although Halevy’s schema-mapping system uses a common set of SO-properties for the form fields in each SO-class, there is no disclosure, teaching, or suggestion in Halevy to use schema-mapping for “*mapping*,” linking, or integrating the field identifiers (parameter names) of different forms on different websites to one another to generate deep-links. We find the Petition’s reasoning and the cited testimony of Dr. Fox on this crucial point to be conclusory. We also find the Preliminary Response to be persuasive, Dr. Malek’s testimony (Ex. 2001) to be credible, and the reasoning of both consistent with the disclosures in Halevy.

In Halevy Figure 3, on which the Petition relies, each form (304) is a separate entry in the database, as depicted below.

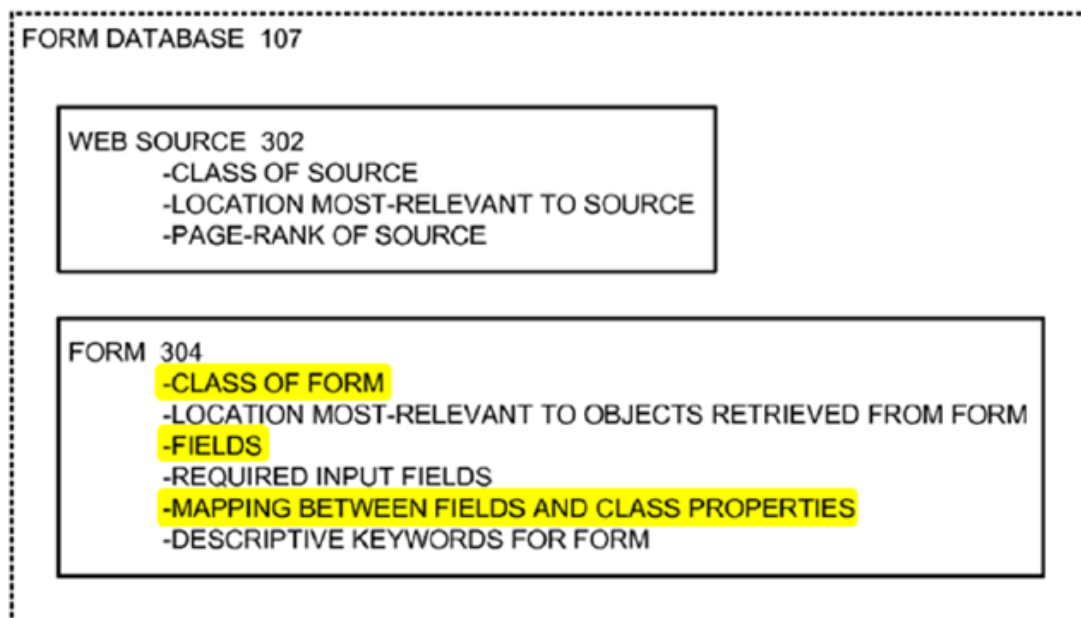


FIG. 3

See Pet. 17–19 (citing Ex. 1003 ¶ 59; Ex. 1006 ¶¶ 44–49, 67, 125). As shown in Figure 3, each separate form entry has information associated with it such as its class, fields, and keywords. *See* Prelim. Resp. 11–12 (citing Ex. 1006 ¶¶ 38, 45, 48). The Preliminary Response correctly points out that Halevy does not disclose, teach, or suggest “that the SO-properties establish any relationship between different websites” on which different forms would be found. *Id.* at 23 (citing Ex. 2001 ¶ 69).

By way of contrast to the claimed invention, in Halevy’s system a user enters a keyword search query and the search engine identifies forms of interest responsive to the user’s query. “[T]he system performs a lookup based on the structured query in the form database to identify forms of interest (step 608) and ranks these forms (step 610).” Ex. 1006 ¶ 137. As Dr. Malek points out, “Halevy does not teach that the SO-properties establish any relationship between different websites. Rather, the SO-properties are simply used by Halevy’s search engine to identify forms relevant to the user’s keyword search,” as shown below in Halevy Figure 6:

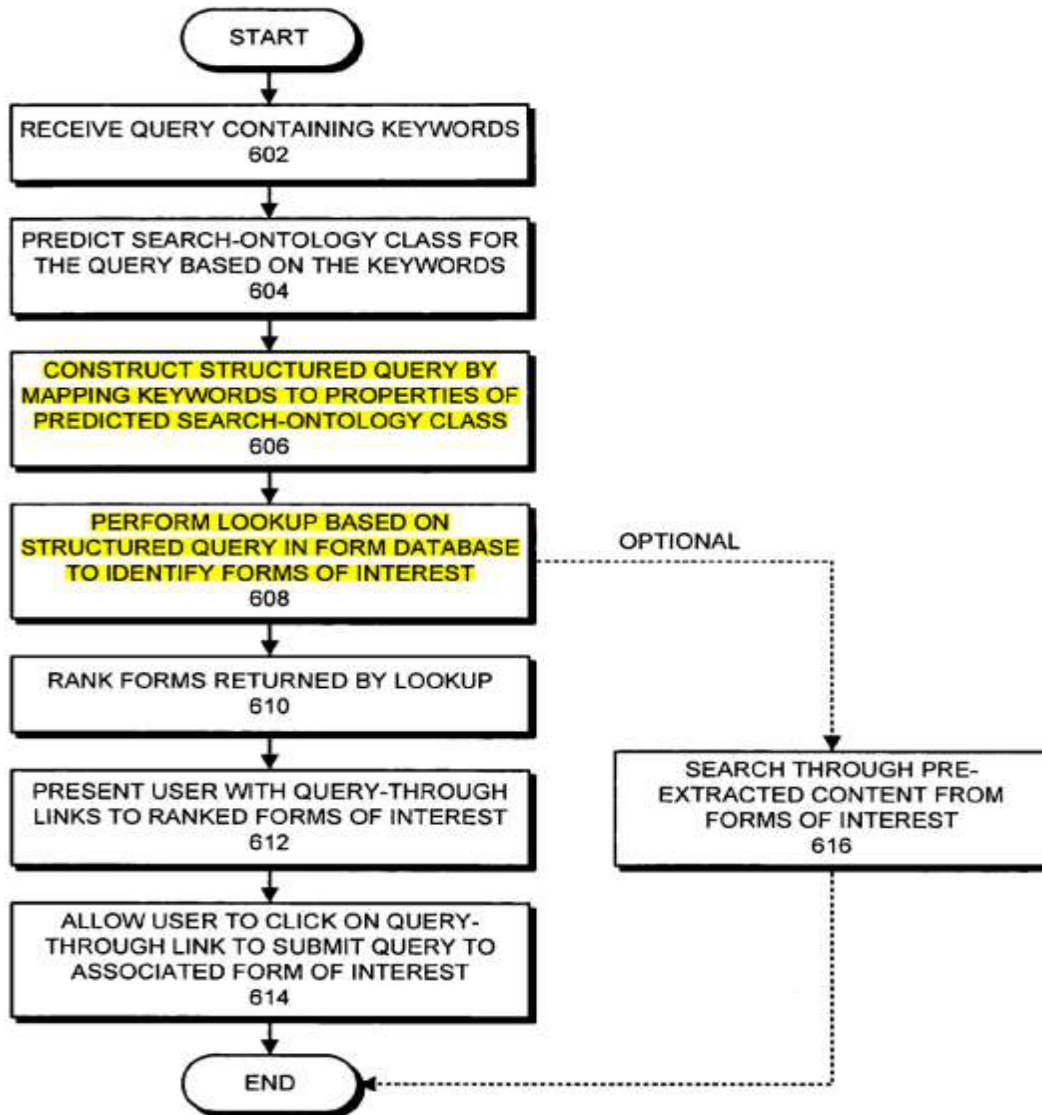


FIG. 6

Ex. 2001 ¶ 69 (Ex. 1006, Fig. 6 (annotated)).

Figure 6 is “a flow chart illustrating the process of searching through content which is accessible through web-based forms.” Ex. 1006 ¶ 31. As depicted in Figure 6, Halevy’s search engine begins with a keyword search used to predict a SO-class for the query (602, 604). The search engine constructs a structured query by “mapping keywords to properties of [the] predicted search-ontology class (606).” Halevy’s system then uses SO-

properties of the predicted class to identify forms relevant to a user's keyword search ("performs a lookup based on the structured query"), ranks the forms, and "allows the user to click on a specific query-through link to submit a query to the associated form of interest." Ex. 1006 ¶¶ 137–138. We do not discern any teaching, suggestion, or motivation in Halevy's search engine process to use the form-field-to-SO-property mapping function for each form, to *map field identifiers* on different forms to each other ("*determining . . . field identifiers of a networked data target that are mapped to the field identifiers of the networked data source*"). The SO-properties in Halevy are used by the search engine to identify forms relevant to the user's keyword search, nothing more. Ex. 2001 ¶ 69.

Patent Owner also persuasively argues:

Here, Petitioner essentially argues that because Halevy's form database associates form fields with SO-properties, there is mapping in the form database between field identifiers of a networked data target and a networked data source. But again, this argument is based on Petitioner's assumption that SO-properties in the form database are "field identifiers of the networked data source," which as discussed in Section IV.A.1. above is incorrect. SO-properties are not "field identifiers," much less "field identifiers of the networked data source." Rather, they are simply search filters that assist Halevy's search engine in determining a form's degree of relevancy to the user's keyword search query.

Prelim. Resp. 25 (citing Pet. 36–37; Ex. 2001 ¶¶ 62, 69–71). We agree. Halevy's SO-property search filters are used identify and rank forms relevant to a user's search query, not to map or link form fields to one another across forms and websites in order to generate deep-links.

We are further persuaded that Halevy's use of a set of prediction algorithms in a "query analyzer," which predicts SO-classes and SO-

properties relevant to a user's query *prior* to searching the form database, "further shows that the form database does not provide the predetermined mapping between different websites in a universal variable data database as contemplated in the '734 patent." Prelim. Resp. 24–25 (citing Ex. 2001 ¶ 70). As Dr. Malek explains:

This prediction process is necessary to transform the user query into a structured query that can be used to run a search through Halevy's form database. The fact that Halevy's system requires a set of algorithms to predict relevant SO-classes and SO-properties, *before any lookup has occurred in the form database*, further shows that Halevy's form database *does not provide the predetermined mapping between websites* in a universal variable data database as contemplated in the '734 patent. *See* EX1001, 5:65-6:10 ("Leveraging this unique and comprehensive universal variable map, embodiments can take a website visitor from an initial stop (e.g., a home page of a first website) directly and *in real-time through a specific deep-link ad to a landing spot on another site* (e.g., a checkout page of a second website), or to a home page on another site with as much data pre-populated as available based on the user's input in the context of the particular E-commerce transaction.").

Ex. 2001 ¶ 70 (emphases added). We agree. Halevy's teaching, to use prediction algorithms to select an SO-class and related SO-properties before executing a search for relevant forms, is inconsistent with the claimed "*universal variable map*" that automatically provides a website visitor with real-time deep-links to another website.

For the reasons given above, we determine the Petition does not adequately support the assertion that Halevy's schema-mapping of form fields to SO-properties, for use in a modified Oldham-Halevy search engine, would have been recognized by a POSITA as:

"the computer" performing Halevy's form query process that *determines the mapping* between corresponding fields of forms

in the form database (i.e., “*field identifiers of a networked data target*”) and the SO-properties identified for the keywords (i.e., “*field identifiers of the networked data source in the universal variable data database*”).

Pet. 36–37 (citing Ex. 1003 ¶ 107).

c. Conclusion

For the reasons given above, the Petition does not adequately support the assertion that the combination of Oldham and Halevy discloses, teaches, suggests, or otherwise renders obvious independent claims 1, 8, and 15 of the ’734 patent. Therefore, the Petition does not demonstrate a reasonable likelihood Petitioner would prevail in showing claims 1–5, 8–12, 15–19 are obvious over Oldham in view of Halevy. *See, e.g., Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc.*, 520 F.3d 1358, 1365 (Fed. Cir. 2008) (“[D]ependent claims are nonobvious if the independent claims from which they depend are nonobvious.”).

B. Asserted Obviousness of Claims 1-5, 8-12, 15-19 Over Oldham, AAPA, and Halevy (Ground 2)

Petitioner argues that claims 1-5, 8-12, 15-19 of the ’734 patent would have been obvious over Oldham, Applicant Admitted Prior Art (“AAPA”), and Halevy. Pet. 5, 50–52. The Petition asserts “[t]o the extent that more detailed disclosure is required regarding utilizing deep-link advertising based on the user’s location (*see, e.g.,* claims 2-5), as evidence of the knowledge of the art, the Applicant Admitted Prior Art (“APA”) states that at the time of the ’734 patent, such sites were known.” *Id.* at 51 (citing Ex. 1001, 2:9–42, 2:51–57, 3:5–23). The Petition argues in particular that:

Applicants admitted that deep-linked-based advertising targeted to the user’s location was known and in use for “search and Ecommerce sites where the user is searching for a product or

service,” like Oldham’s search website (as discussed *supra* §VI.A), and was known to “provide ... better targeting” resulting in “greater value to end-users” and “better return-on investment for advertisers.” *Id.*, 2:3-8, 2:15-17, 2:51-57; Fox, ¶136. With these sites, advertisements were filtered based on a user’s location and user-entered search parameters (e.g., “where s/he is traveling from, where to, travel dates, how many people in the party, class of travel, etc.”), and the parameters were “passed along with each ad click to the appropriate advertiser” to “automatically activate searches from their home page,” thereby deep-linking the user “into their booking process.” Ex-1001, 2:15-17, 2:52-65.

Id. The Petition does not rely on AAPA to address the deficiencies of Oldham and Halevy discussed above regarding independent claims 1, 8, and 15. As a result, for the same reasons given above for claims 1, 8, and 15, the Petition has not demonstrated a reasonable likelihood Petitioner would prevail in showing that claims 1–5, 8–12, 15–19 of the ’734 patent are obvious over Oldham, AAPA, Halevy (Ground 2).

C. Asserted Obviousness of Claims 6–7, 13–14, 20 Over Oldham, Halevy, and Russo (Ground 3), and Oldham, AAPA, Halevy, and Russo (Ground 4)

Petitioner argues that dependent claims 6–7, 13–14, and 20 of the ’734 patent would have been obvious over either Oldham, Halevy, and Russo (Ground 3) or Oldham, AAPA, Halevy, and Russo (Ground 4). Pet. 5, 53–62. Claims 6–7 depend from claim 1, claims 13–14 depend from claim 8, and claim 20 depends from claim 15. The dependent claims are directed to embodiments where “*the networked data source is embodied in a first mobile device, wherein the networked data target is embodied on a second mobile device*” (claims 6, 13, 20), and the “*order form at the networked data target is automatically filled in or acted upon with the location information of*” the first and second mobile devices in claim 6

(claims 7, 14, 20). The Petition relies on Russo solely to address the additional limitations in claims 6–7, 13–14, and 20, and it does not rely on Russo to address the deficiencies of Oldham and Halevy discussed above regarding independent claims 1, 8, and 15. *Id.* at 73–76. As a result, for the same reasons given above for claims 1, 8, and 15, the Petition has not demonstrated a reasonable likelihood Petitioner would prevail in showing that claims 6–7, 13–14, and 20 of the '734 patent are obvious over Oldham, Halevy, and Russo (Ground 3) or Oldham, AAPA, Halevy, and Russo (Ground 4).

IV. CONCLUSION

For the foregoing reasons, we determine Petitioner has not established a reasonable likelihood of prevailing in its challenge to the patentability of claims 1–20 in the '734 patent. Therefore, we deny institution of *inter partes* review of the challenged claims.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, the Petition is denied and *inter partes* review is not instituted.

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