

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BRIGHT DATA LTD.,

Petitioner

v.

OXYLABS, UAB,
Patent Owner

Case IPR2023-00840
Patent No. 10,965,770

PATENT OWNER'S PRELIMINARY RESPONSE

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	OVERVIEW OF THE '770 PATENT	1
A.	Independent Claims 1, 16, and 19	4
III.	CLAIM CONSTRUCTION	8
A.	Proxy Rotator (Claim 16)	9
B.	Request Optimizer (Claims 16-18)	9
C.	Scraping Strategy (Claims 1, 4, 5, 8, 10, 11, 16, 19, 22, 23, and 26) ..	9
D.	User Device (Claims 1, 3, 9, 10, 15-19, 21, 24, and 26)	10
E.	“identify[ing] discrepancies between the request and the scraping strategy” (Claims 1, 16, and 19)	10
IV.	OVERVIEW OF COUSINS (EX1004)	12
V.	GROUND 1: THE PETITION FAILS TO SHOW ANTICIPATION OF CLAIMS 1, 16, and 19 BY COUSINS	15
A.	Claims 1 and 19 are Novel Over Cousins	15
1.	<i>[1d], [19d] Petitioner Fails to Establish that Cousins Identifies Discrepancies Between the Request and the Scraping Strategy</i>	16
2.	<i>[1f], [19f] Petitioner Fails to Establish that Cousins Sends an Adjusted Request to a Target Through a Proxy Selected According to the Scraping Strategy</i>	19
3.	<i>[1b]/[1e], [19b]/[19e] Petitioner Fails to Establish Cousins Compares and Adjusts Parameters of a Request as Claimed ..</i>	22
4.	<i>[19g] Petitioner Does Not Evaluate All Limitations of Claim 19</i>	25

B.	Claim 16 Is Novel Over Cousins.....	25
1.	<i>[16e] Petitioner Fails to Establish that Cousins Identifies Discrepancies Between the Request and the Scraping Strategy</i>	<i>25</i>
2.	<i>[16g] Petitioner Fails to Establish that Cousins Sends the Adjusted Request Through a Proxy Selected by the Proxy Rotator According to the Scraping Strategy.....</i>	<i>26</i>
3.	<i>[16c]/[16f] Petitioner Fails to Establish that Cousins Compares and Adjusts Parameters of a Request as Claimed ..</i>	<i>28</i>
4.	<i>[16b]/[16c] Petitioner Does Not Identify a Proxy Rotator and a Request Optimizer</i>	<i>28</i>
C.	Petitioner Fails to Identify the Alleged Parameters in Cousins	29
VI.	GROUND 2: THE PETITION FAILS TO SHOW OBVIOUSNESS OF CLAIMS 1, 10, and 19 OVER COUSINS	32
A.	[1f], [19f] Petitioner’s Remarks Do Not Remedy the Deficiencies of its Ground 1.....	32
B.	[16b] Petitioner Fails to Establish a POSITA Would Understand Cousins’ Minions as a Proxy Rotator.....	33
1.	<i>Petitioner’s Theory is Inconsistent</i>	<i>33</i>
2.	<i>Petitioner’s New Theory Is Legally Insufficient</i>	<i>34</i>
3.	<i>Petitioner’s Analysis is Deficient.....</i>	<i>35</i>
VII.	GROUND 3: THE PETITION FAILS TO SHOW OBVIOUSNESS OF CLAIMS 1, 16, and 19 OVER COUSINS & TAYLOR.....	39
A.	[1f], [19f] Petitioner’s Remarks Do Not Remedy the Deficiencies of its Ground 1.....	39
B.	[16g] Petitioner’s Remarks Do Not Remedy the Deficiencies of its Ground 1	39
C.	Petitioner’s Combination of Cousins and Taylor is Deficient	40
VIII.	GROUND 4 AND 5 DO NOT SAVE THE PETITION’S DEFICIENCIES REGARDING THE INDEPENDENT CLAIMS	42
IX.	CONCLUSION.....	43

PATENT OWNER'S EXHIBIT LIST

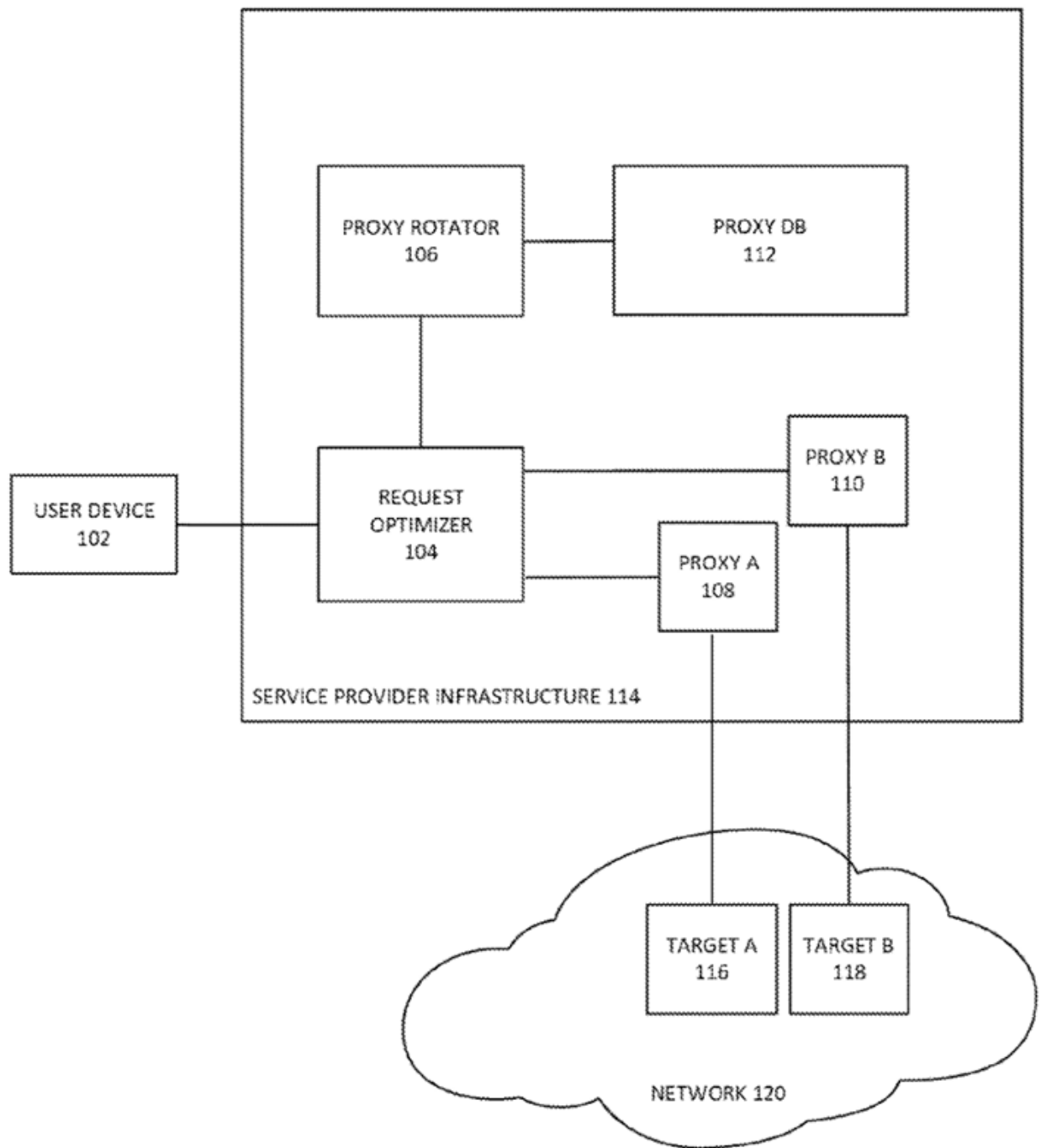
Exhibit	Shorthand	Description
2001	Olivier	Declaration of James Olivier, Ph.D.
2002	Olivier CV	CV of James Olivier, Ph.D.
2003	Squid Website	Squid, <i>Squid: Optimising Web Delivery</i> (2020) (available at http://web.archive.org/web/20200910051849/http://www.squid-cache.org/)
2004	Squid Examples	December 24, 2019 Archived Version of: Squid Wiki, <i>Configuration Examples</i> (2019) (available at http://web.archive.org/web/20191224082656/https://wiki.squid-cache.org/ConfigExamples)
2005	Reverse Proxy	<i>Understanding Reverse Proxy Servers – and the Mailman</i> , Scott Forsyth, Microsoft (2009) (available at https://weblogs.asp.net/owscott/understanding-reverse-proxy-servers-and-the-mailman)
2006	Archived Reverse Proxy	2014 Archived Version of EX2005 <i>Understanding Reverse Proxy Servers – and the Mailman</i> , Scott Forsyth, Microsoft (2009) (https://weblogs.asp.net/owscott/understanding-reverse-proxy-servers-and-the-mailman) (available at http://web.archive.org/web/20141004124934/http://weblogs.asp.net/owscott/understanding-reverse-proxy-servers-and-the-mailman)

I. INTRODUCTION

Institution should be denied because the Petition fails to establish a reasonable likelihood of prevailing on any challenged claim. The references cited in each of Petitioner's Grounds fail to disclose the claimed features; the Petition improperly attempts to rewrite claim elements in a manner contradictory to their plain meaning to fill the gaps in its anticipation theory; and Petitioner's anticipation and obviousness theories are conclusory and legally insufficient. For at least these reasons, all of Petitioner's proposed grounds must fail.

II. OVERVIEW OF THE '770 PATENT

The '770 Patent discloses systems and methods "relate[d] to data retrieval from the web" and that "use data gathering technologies to more efficiently gather large amounts of data." EX1001, 1:6-11. An example of the overall architecture of such a system can be seen in the illustrative component diagram of FIG. 1 (below).



See EX1001, 8:59-61.

In one of the disclosed methods of data retrieval, the request optimizer 104 receives a request from a user device 102 and “can read the metadata of the request and adjust the request using different pre-established Scraping strategies to better

scrape the Target.” *Id.*, 7:12-18. For example, the Request Optimizer 104 can “modify the request parameters—HTTP headers & cookies, HTTP methods (such as POST, GET, PUT, PATCH, and DELETE) to some extent” (*Id.*, 9:11-16), which “differ[s] from current industry standards ... [that do] not modify the requests received from the User device 102, instead blindly forwarding the request to the Target 116.” *Id.*, 10:18-25.

Specific examples of such changes to the parameters of the user’s request are:

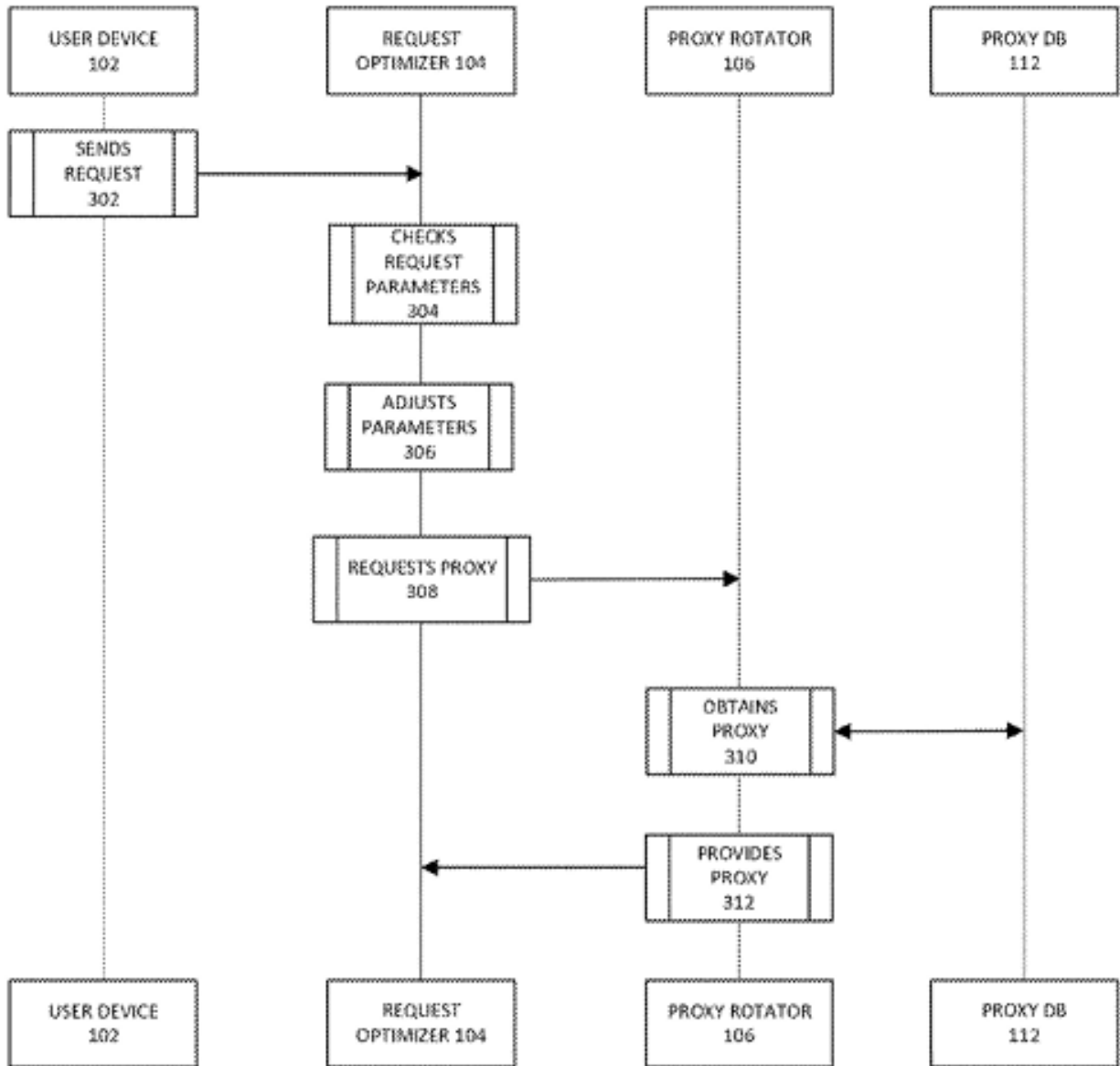
where the HTTP request body has its content type defined as one of the Multipurpose Internet Mail Extensions (MIME) types of “compressed file” e.g. in .zip format (MIME type=application/zip). However, the Service provider identifies the Target as a system, that works better with compressed data in .gz format (MIME type=application/gzip). The request optimizing platform within the Service provider Infrastructure examines the headers and the body of the request, identifies this discrepancy, and adjusts them accordingly, converting the content to the appropriate format as well as updating the corresponding headers.

EX1001, 10:50-64; *see also id.*, 10:65-11:9 (adjusting content type of request from “application/xml” to “text/xml” based on “pre-established scraping logic guidelines” that indicate the requested target will likely block the request). If “the parameters within the request are not deemed aligned with the corresponding Target in the fashion considered most effective, [then] they are adjusted according to the Scraping Logic 202 loaded into the memory of the Request Optimizer 104” *Id.*, 11:16-20.

In some methods, request optimizer 104 “obtains a proxy from the Proxy Rotator 106” to fulfill the request. EX1001, 12:28-30. When providing the proxy to request optimizer 104, proxy rotator 106 searches a proxy database 112 and “chooses a particular proxy that is suitable to implement the user's request” for the optimal (i.e., checked or adjusted) request parameters. *Id.*, 12:30-37.

A. Independent Claims 1, 16, and 19

Independent claim 1 of the '770 Patent is directed to “a method for data extraction and gathering from a web server.” EX1001, 19:13-14. The annotated Figure 3A of the '770 Patent, below, illustrates a partial flowchart diagram of an illustrative method of data extraction for some of the steps covered by independent claim 1.



See EX1001, FIG. 3A, 10:37-51.

In FIG. 3A, the user device 102 sends a request to request optimizer, which checks the request parameters for discrepancies according to one or more scraping strategies. *Id.* For example, “Request Optimizer 104 checks if the URL address is indicated correctly, and, if not, then the URL address is corrected in a way to minimize blocking rate.” *Id.* “The Request Optimizer 104 also checks the Headers

and Cookies of the request and adjusts them in a way to increase the quality of the request as well as the quality of the data that is expected to be received from a Target.” *Id.*, 11:20-27. With reference to the sequence diagram of Figures 3A, 3B and the illustrative system of FIG. 1, claim 1 recites **[1a]** a method for data extraction and gathering from a web server comprising:

- [1b]** comparing parameters of a request received from a user device [102] with a list of scraping strategies [step 304];
- [1c]** selecting, from the list of scraping strategies, a scraping strategy corresponding to the parameters of the request;
- [1d]** identifying discrepancies between the request and the scraping strategy;
- [1e]** adjusting the parameters of the request according to the scraping strategy to form an adjusted request [step 306];
- [1f]** sending the adjusted request to a target through a proxy [108, 110] selected according to the scraping strategy [step 314]; and
- [1g]** receiving a reply from the target [116, 118].

EX1001, 19:15-25.

Claims 16 and 19 are directed to a system and a computing device that include limitations similar to the Limitations [1a]-[1g] of claim 1.

With reference to FIG. 1, claim 16 recites a system comprising “a proxy rotator [106] operable to provide a plurality of proxies over the network” ([16b]) and

“a request optimizer [104].” EX1001, 20:12-16. Similar to claim 1, the request optimizer is operable to:

[16c] compare parameters of a request received from a user device with a list of scraping strategies, [16d] to select a scraping strategy from the list of scraping strategies a scraping strategy that corresponds to the parameters of the request, [16e] to identify discrepancies between the request and the scraping strategy, [16f] to adjust the parameters of the request according to the scraping strategy to form an adjusted request, and [16g] to send the adjusted request to a target through a proxy selected from a proxy database by the proxy rotator according to the scraping strategy

Id., 20:16-26.

Claim 19 recites “a non-transitory computer readable medium for data extraction and gathering from a web server comprising instructions” and “a computing device within a service provider infrastructure” ([19a]). *Id.*, 12:38-42. The instructions, when executed by the computing device, cause the device to perform steps similar to claim 1, including:

[19b] comparing parameters of a request received from a user device with a list of scraping strategies; [19c] selecting, from the list of scraping strategies, a scraping strategy corresponding to the parameters of the request; [19d] identifying discrepancies between the request and the scraping strategy; [19e] adjusting the parameters of the request according to the scraping strategy to form an adjusted request; [19f]

sending the adjusted request to a target through a proxy selected according to the scraping strategy; [and] [19g] receiving a reply from the target

EX1001, 12:43-53.

III. CLAIM CONSTRUCTION

Claims are interpreted according to the *Phillips* standard. 83 Fed. Reg. 51340, 51340-44 (Oct. 11, 2018); *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005). Applicants—acting as their own lexicographer—can define their own claim terms in the specification, thereby giving the defined terms a meaning that may be different than the ordinary and customary meaning in the art. *See Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 1301 (Fed. Cir. 1999) (“Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim.”); *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (“the inventor’s intention, as expressed in the specification, is regarded as dispositive.”).

The ’770 Patent expressly defines a number of terms that are used in the claims. *See, e.g.*, EX1001 at 7:4-8:44; *see also id.*, 6:65-67 (“intended to be interpreted in the broadest possible interpretation”—not rewritten *ad hoc*). The Petition largely fails to address the specification’s definitions of claim terms, much less demonstrate that the cited references disclose each claimed element according to its appropriate meaning.

A. Proxy Rotator (Claim 16)

The '770 Patent defines this term: “Proxy Rotator **106**—is a part of the Service Provider Infrastructure and is coupled with separate external components implementing specific assisting functionalities and is responsible for proxy control, rotation, maintenance, collecting statistical data, and reporting.” EX1001, 7:24-28.

B. Request Optimizer (Claims 16-18)

The '770 Patent defines this term: “Request Optimizer **104**—is a next generation proxy that is a part of the service provider infrastructure that accepts requests from the User Device and implements the requests through the system.” EX1001, 7:12-15. The “Request Optimizer can read the metadata of the request and adjust the request using different pre-established Scraping strategies to better scrape the Target.” *Id.*, 7:15-18.

C. Scraping Strategy (Claims 1, 4, 5, 8, 10, 11, 16, 19, 22, 23, and 26)

The '770 Patent defines this term: “Scraping strategy **504**—is a set or request parameters and their values, optimized for a particular type of request or target, that Request Optimizer 104 applies to the original request based on the decisions of what adjustments should be introduced to the original request.” EX1001, 8:27-31. The scraping strategy “may be a pre-defined artefact devised, developed, and manually registered beforehand” and may also be formed “dynamically based on the automatic aggregated analysis of the scraping results.” *Id.*, 8:32-36.

D. User Device (Claims 1, 3, 9, 10, 15-19, 21, 24, and 26)

The '770 Patent recites that the “User Device **102**—can be any suitable user computing device, including but not limited to, [various examples] ... or any other electronic device used for making a scraping request.” EX1001, 7:4-11.

E. “identify[ing] discrepancies between the request and the scraping strategy” (Claims 1, 16, and 19)

Petitioner contends “a POSA would have understood identifying a discrepancy as identifying a disagreement or some difference between the parameters of the received request and the parameters of a request according to the selected scraping strategy.” Pet., 25. Petitioner incorporates this construction to each independent claim for Grounds 1 (*Id.*, 35, 38) , 2 (*Id.*, 35, 38) , and 3 (*Id.*, 62, 64, 66). Petitioner’s claim construction is improper and is merely an attempt to fill the gaps in Petitioner’s invalidation theories.

Petitioner contends “[t]he '770 patent does not define what may be classified as a discrepancy” and asserts that discrepancy is defined as “the quality or state of disagreeing.” Pet., 25. Patent Owner disagrees with this reasoning, as identifying discrepancies is explained in the '770 patent, for example, “parameters within the request are not deemed aligned with the corresponding Target in the fashion considered most effective, [then] they are adjusted according to the Scraping Logic 202.” EX1001, 11:16-20; *See also* EX2001, ¶27; *supra* §II.

At base, Petitioner attempts to rewrite the claim to as a necessary predicate to its anticipation theory. As shown in the table below, Petitioner not only modifies the “discrepancies” term, but also adds new claim language that is completely unrelated to the defined term.

Claim Language	Claim Language with Petitioner’s Definition	Petitioner’s Construction
identifying discrepancies between the request and the scraping strategy	identifying <i>a disagreement or some difference</i> between the request and the scraping strategy	identifying <i>a disagreement or some difference</i> between <u>the parameters of the received request</u> and <u>the parameters of a request according to the selected scraping strategy</u>

See EX1001, 19:19-20; Pet., 25¹.

Petitioner does not—and cannot—provide any reasoning as to why a POSITA looking at the dictionary definition of discrepancy would construe the claim as proposed by Petitioner’s expert. See EX2001, ¶28. There is no logical connection between the proposed definition of discrepancy and Petitioner’s rewording of the claim to identify differences between the request and *a different request*, rather than “between the request and *the scraping strategy*,” as claimed. It is well understood that “[i]nventors are masters of their claims, and the words they use to describe and claim their invention are decisive and binding.” *Bio-Rad Lab’ys, Inc. v. Int’l Trade*

¹ All emphasis added unless otherwise indicated.

Comm'n, 998 F.3d 1320, 1331 (Fed. Cir. 2021). Petitioner cannot dispel this principle via a citation to extrinsic evidence and conspicuous sleight of hand.

Petitioner's construction is inconsistent with the record, legal precedent, and Petitioner's own reasoning and, therefore, the Board should decline to adopt Petitioner's construction. *See* EX2001, ¶¶26-28. Ultimately, construction is not needed to understand this straightforward claim phrase, much less to resolve the Petition's shortcomings addressed below.

IV. OVERVIEW OF COUSINS (EX1004)

Cousins discloses two types of crawls: (1) a scheduled crawl or (2) a user demanded crawl. EX1004, 3:23-26.

Scheduled crawls are automatically generated by a scheduling engine (i.e., scheduler 112), not a user device. EX1004, 4:4-6; 9:28-31; *see id.*, 14:1-10. These scheduled crawls are not associated with requests from a user device. *See id.*

On the other hand, for a user demanded crawl, a "request source 136 generates a request for a specific item of data" that "includes a URI that identifies a specific item of data from a collection of data." *Id.*, 6:14-27. For user demanded crawls, a client engine 100 of a web crawler 144 receives the request for data and the web crawler acts to fetch the data, which is typically a web page from the target site 128. EX1004, 6:10-31. "Typically, a user will access the crawler's web site through the

user's Internet connection, and then input a request for a specific item into a form provided by the crawler's web site." *Id.*, 6:21-23.

As shown in FIG. 2, "the real time client engine 100 converts 204 the request information into an LUID (logical user id)" including: the URI of the request, a "unique identification number 312," and "auction information 308." *Id.*, 7:4-10.

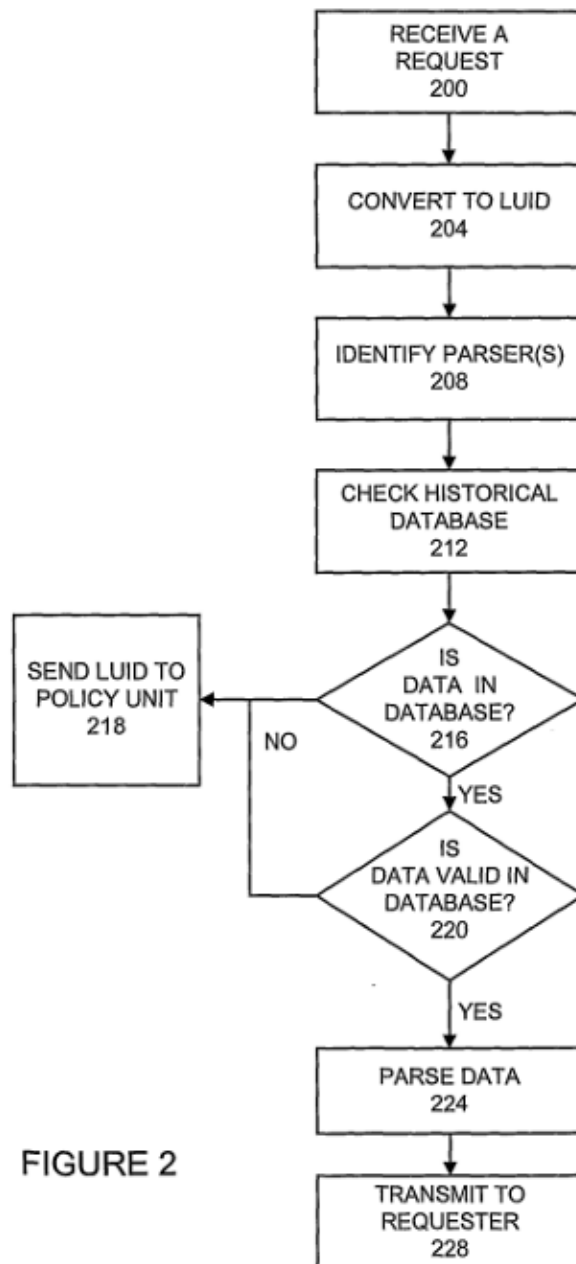


FIGURE 2

This LUID is then associated with “a client engine identification and a parser identification.” EX1004, 7:16-21. Subsequently, “client engine 100 checks 212 a historical database 104 to determine if the request for data can be satisfied by the data stored in the historical database 104,” which was previously retrieved by the crawler. *Id.*, 7:29-32. If the requested data is in the historical database 100 and is up-to-date, then the data is retrieved without initiating a crawl. *Id.*, 8:4-21.

Alternatively, if the requested data is not found in historical database 104 (or invalid), the client engine 100 passes 218 the LUID 300 to the policy engine 116. EX1004, 8:22-23. Operation of the crawler policy engine 116 is illustrated in Figure 5, where policy engine 116 receives the LUID and builds “a policy or set of policies for the target site 128.” *Id.*, 9:25-33.

The policies are preferably stored in separate databases organized by different topics and policy engine 116 will examine each database to determine if a policy is applicable to the crawl request. EX1004, 10:3-7. For example, policy engine 116 will examine the time of day database to determine if a policy is applicable to the crawl request based on the current time of day. *Id.*, 10:7-11. “After the policy engine 116 has retrieved all potentially applicable policies, the policy engine 116 applies the policies to determine 512 whether a crawl should occur.” *Id.*, 11:1-2. If the crawl is not permissible, a crawl request 400 is stored in a request queue (i.e., not

sent to the target. *Id.*, 11:2-9. And, if the crawl is allowed, the policy engine 116 determines a priority and sends the crawl request to the outgoing queue. *Id.*

V. GROUND 1: THE PETITION FAILS TO SHOW ANTICIPATION OF CLAIMS 1, 16, and 19 BY COUSINS

“A claim is anticipated [under 35 U.S.C. § 102] only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. Inc. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Moreover, “[b]ecause the hallmark of anticipation is prior invention, the prior art reference—in order to anticipate under 35 U.S.C. § 102—must not only disclose all elements of the claim within the four corners of the document but must also disclose those elements ‘arranged as in the claim.’” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008); *see also Microsoft Corp. v. Biscotti, Inc.*, 878 F.3d 1052, 1068-70 (Fed. Cir. 2017) (“[I]f [a reference] does not expressly spell out all the limitations arranged or combined as in the claim,” it can only anticipate “if a person of skill in the art, reading the reference, would at once envisage the claimed arrangement or combination [arranged as in the claim].”) (quotations omitted).

A. Claims 1 and 19 are Novel Over Cousins

For claim 19 (Limitations [19b]-[19f]), “Petitioner incorporates by reference its discussion” for the corresponding limitations in claim 1 (Limitations [1b]-[1f]). Pet., 38-39. The Petition and Petitioner’s expert do not add any analysis for the

limitations of claim 19 outside of Limitation [19a]. *Id.*; EX1003, ¶¶116-124. Thus, Petitioner’s analysis of claims 1 and 19 can be treated as identical, and the Petition’s deficiencies with respect to claim 1 must also apply to claim 19. For the reasons explained below, Petitioner fails to establish Cousins anticipates claims 1 and 19.

1. [1d], [19d] Petitioner Fails to Establish that Cousins Identifies Discrepancies Between the Request and the Scraping Strategy

Petitioner provides a handful of alleged discrepancies for Limitation [1d], each of which fail to disclose identifying discrepancies between the request and the scraping strategy, as claimed. *See* EX2001, ¶29.

First, Petitioner contends that Cousins discloses a discrepancy in the example “where there are two separate received requests where both requests are for the same target site” and “[i]nstead of executing the two separate requests [Cousins] “combines the multiple requests 400 into a single crawl request.” Pet., 26 (quotation omitted). That is, Petitioner allegedly identifies a discrepancy between “two separate requests.” *Id.* However, as explained above in §III.E, Limitation [1d] requires identifying discrepancies between *the request* and *the scraping strategy*, not two separate requests. *See* EX2001, ¶¶29-30. Cousins’ crawl requests are not the claimed scraping strategy. EX2001, ¶31. Thus, Petitioner’s alleged identification of two separate requests (Pet., 26) or reference to its improper claim construction (Pet., 25) cannot anticipate the claim. *See* EX2001, ¶31. Moreover, Petitioner’s theory must also fail since the identified example—“where both requests

are for the **same** target” (Pet., 26)—looks for similarities, not discrepancies. *Cf* Pet., 25 (discrepancy is “disagreeing or being at variance”); *supra* §II.

Next, Petitioner identifies an example of obtaining data from historical database 104 as allegedly meeting the claimed limitation. *See* Pet., 26 (citing EX1004, 8:10-16). Petitioner’s identified example does not disclose the claimed feature. EX2001, ¶32. The identified disclosure corresponds to steps 216 and 220 of Cousins’ FIG. 2, in which the requested data from request source 136 is checked with a historical database 104 to determine if the requested data is already stored within the database. *See* EX1004, 7:29-8:21. Cousins explains that if the requested data **matches** the stored data, then “client engine 100 determines 220 whether stored data [in historical database 104] is valid” (i.e., “if the stored data has been crawled within a predefined period of time.”) EX1004, 8:7-9. If the data is valid, client engine 100 sends the stored data without having to crawl a target site and, if not valid, the client sends LUID to policy engine 116, at step 218. EX1004, 8:7-23.

This process of obtaining data from historical database 104 does not identify a discrepancy between the request and a scraping strategy. EX2001, ¶32. Again, Petitioner is identifying an example in which Cousins determines whether data in **a request** is the **same** as data retrieved from **a previous request**. *Id.*; *see* Pet., 26 (previous “crawl already has retrieved the requested data”). This is not a

discrepancy, and it is not between the request and a scraping strategy.² EX2001, ¶32. Petitioner does not identify any other information regarding the request and, therefore, Petitioner’s second example fails to meet the claim. *See id.*

Finally, Petitioner identifies a “discrepancy regarding the priority of competing requests” in which a “user demand request is given a higher priority than the request from the automated discovery crawl.” Pet., 27. This theory also fails. *See* EX2001, ¶33. Sorting priority between *two separate requests* does not identify a discrepancy between the request and a scraping strategy. *Id.* As explained in §III.E, Petitioner seeks to rewrite the claim language to map to a discrepancy between two requests—rather than “between the request and the scraping strategy,” as claimed. Petitioner’s theory must fail for the same reason as its proposed construction. *Microsoft*, 878 F.3d at 1068 (“prior art reference must disclose all elements of the claim ... *arranged as in the claim.*”) (quotations omitted).

For at least this reason, Ground 1 must fail with respect to claims 1 and 19.

² Additionally, for this alleged scraping strategy, which “dictates that a recently executed crawl already has retrieved the requested data,” the requested data is obtained from historical database 104 “without ever requiring a crawl of the target site 128.” EX1004, 8:7-29. Thus, no request is *sent* according to a strategy and no reply is *received* from the target site, as in [1f] and [1g]. *Id.*; *see* §§II.A, V.A.2.

2. [1f], [19f] Petitioner Fails to Establish that Cousins Sends an Adjusted Request to a Target Through a Proxy Selected According to the Scraping Strategy

For claims 1 and 19, Petitioner contends that “Cousins discloses scraping strategies for a target site that include best practices and/or efficiency-based criteria,” (Pet., 28) which Petitioner identifies as (1) do not crawl between 9:00 a.m. and 5:00 p.m. (2) do not crawl if web site is shut down, or (3) never crawl (*Id.*, 23). Ignoring these listed scraping strategies, Petitioner then turns to a separate portion of Cousins’ disclosure where “if one minion is unable to crawl a target site, because of congestion or network failures, a different minion located elsewhere in the Internet can still access the target site and provide the requested crawl.” Pet., 28-29 (citing EX1004, 4:33-5:3).

For the “best practices” strategies identified by the Petitioner, each strategy is directed to **not** crawling a website. *See* Pet., 28 (“do not crawl” or “never crawl”); EX2001, ¶38. If a website is not crawled, then a request is **not** sent to minions 124 or target site 128. EX1004, 11:2-4 (“If the crawl is not permissible at this time according to one of the policies,” then the request “is stored 524 in a request queue.”). Thus, Cousins **does not send** any request to a target through a proxy according to the Petition’s identified policies. EX2001, ¶38. This cannot disclose the claimed feature of sending the adjusted request. *Id.*

Petitioner's reliance on Cousins' disclosure of reaching a target site from multiple pathways is also misguided. *See* EX2001, ¶¶39-41, 43. The cited portions of Cousins do not describe the policy engine selecting a minion, it only describes that if one minion fails, a different minion maybe able to complete the crawl. EX2001, at ¶43. To illustrate, Cousins' policy engine 116 builds policies, determines if a crawl is permitted at the current time, determines a priority of the crawl, and then "the crawl request 400 is sent [at step] 520 to the outgoing queue 120." EX1004, 12:15-16, FIG. 5. The "crawl request 400 stays in the queue 120 until the crawl request 400 is the highest priority request waiting in the queue. Then, a minion 124 will pull the request from the queue 120 and fetch the page from the target site 128 that contains the requested data." EX1004, 13:3-5. This minion is simply fetching the highest priority request from a queue. EX2001, at ¶39. There is no evidence or discussion that this minion is selected *according to the policies*—especially, policies that withhold the crawl from outgoing queue 120, as identified by Petitioner. *See* EX2001, ¶¶39-41.

In some configurations, the output queue 120 "automatically schedules a second crawl request 400 to be made in the near future on the expectation that the first crawl request 400 will fail." EX1004, 13:6-8. If the first request succeeds, then the second crawl request 400 is deleted; otherwise, the second crawl request is run when it is the highest priority request waiting in the queue. *Id.*, 13:3-10. There is

also no disclosure that the minion pulling the second request from the queue 120 is selected *according to the policies*. EX2001, at ¶40.

Cousins’ use of multiple minions also fails to disclose the claimed feature in the same level of detail as recited in the claim. Cousins simply explains that “due to the [large] number of minions, a target site can be accessed from multiple different pathways. EX1004, 4:32-33.” And “[b]y placing the minions 124 on as many different backbones and different locations as possible ... the minions 124 can approach target site server 708 from a sufficient number of different paths to avoid network failures and avoid or work around bottlenecks in network communications that would ordinarily prevent a crawl.” EX1004, 15:7-12.

The use of a large number of minions in various locations fails to disclose “a proxy selected according to the scraping strategy.” See EX2001, at ¶¶41, 43. Nor does Petitioner sufficiently explain the necessary inferences and logical steps required to jump from the quoted portions of the relevant references and arrive at the specific language found in the claim. Additionally, the fact that Cousins’ minions may be located topologically close to a server or can be implemented to be multithreaded fails to assert—let alone establish—that a minion was selected according to a scraping strategy. EX2001, at ¶41. There is simply no explanation or logical connection as to how Cousins’ use of a second minion when a first minion

suffers “congestion or network failures” discloses a proxy selected according to the scraping strategy, as required by the claim.

For this additional reason, the Petitioner cannot establish anticipation of claims 1 and 19, and Ground 1 must fail.

3. [1b]/[1e], [19b]/[19e] Petitioner Fails to Establish Cousins Compares and Adjusts Parameters of a Request as Claimed

To anticipate claims 1 and 19, Cousins must disclose (1) comparing parameters of a request to a list of scraping strategies and (2) adjusting the parameters of that request according to the scraping strategy. *Supra*, §II.A.

At the outset, Petitioner fails to identify any corresponding parameters in Cousins with the requisite particularity. *See* EX2001, at ¶34; *infra* §V.C; *Harmonic v. Avid Tech*, 815 F.3d at 1363 (“[T]he petitioner has the burden from the onset to show with particularity why the patent ... is unpatentable.”). Moreover, the portions of Cousins the Petition does identify do not disclose the claimed feature.

For Limitations [1b], Petitioner contends “the parameters of a request include a request for a specific item” (Pet., 23), which Cousins describes as a specific item of data (e.g., price of an item at auction) from a target site (e.g., www.auctionwatch.com) (*supra* §IV; *see* EX1004, 5:7-9). For Limitations [1e],

Petitioner contends that Cousins adjusts parameters by “consolidating multiple requests.”³ Pet., 27-28.

Petitioner does not explain how Cousins discloses comparing a request for a specific item (or any other portion of the request) with scraping strategies. *See* EX2001, at ¶¶34-36. Petitioner merely concludes—without evidence or explanation—that “Cousins discloses comparing the request parameters with lists of policies, e.g., scraping strategies, that includes where ‘[p]olicies are maintained in databases sorted by different categories such as target site, time of day, location of target site, etc.’” Pet., 23 (citing EX1004, 3:13-16). Not only is Petitioner’s assertion untethered to the identified parameters (a specific item of data). *See* EX2001, at ¶36. But, Petitioner’s citation to the list of different categories of polices in Cousins cannot support the assertion that Cousins “compar[es] the request parameters with lists of policies” (Pet., 23). *See id.* Without this, Petitioner’s contention lacks any

³ Petitioner also contends rescheduling of a crawl request “by the scheduler 112” discloses adjusting the “*policy* parameters.” Pet., 18. But this must fail at least because (i) “scheduler 112” only works with scheduled crawls and not “a request received *from a user device* [1b]” (§IV) and (ii) adjusting parameters of policies—which Petitioner maps to scraping strategies (Pet., 23)—does not adjust “[1b], [1e] the parameters *of the request* [1b, 1e].” *See* §II.A.

evidentiary basis except for the parroted testimony of Dr. Williams (EX1003, ¶84), which cannot remedy these deficiencies. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 12 at 5 (PTAB Feb. 10, 2023) (precedential).

Independently, Petitioner’s ground must also fail because it does not establish that Cousins discloses adjusting the parameters of that request according to the scraping strategy. *See* EX2001, at ¶37. In Cousins, “policy engine 116 combines the multiple requests 400 into a single crawl request 400 comprising one URL field 408” when separate client engines “desire the same URL, but desire different information from the URL.” EX1004, 11:17-24. The combination of two requests does not adjust the specific item of data requested, its simply adds that requested item into an existing request. EX2001, at ¶37 (“nothing has been adjusted from the request”); *cf* EX1001, 11:20-22 (“The Request Optimizer 104 checks if the URL address is indicated correctly, and, if not, then the URL address is corrected in a way to minimize blocking rate.”). Petitioner provides no other identification of the parameters of the request or discussion as to how these parameters are adjusted.

For at least these reasons, Petitioner cannot establish anticipation of claims 1 and 19. *Net MoneyIN*, 545 F.3d at 1371 (“[D]ifferences between the prior art reference and a claimed invention, however slight, invoke the question of obviousness, not anticipation.”).

4. [19g] Petitioner Does Not Evaluate All Limitations of Claim 19

Claim 19 recites “receiving a reply from the target.” EX1001, 20:43; *Supra* §II.A (Limitation [19g]). The Petitioner does not evaluate or consider this limitation in Ground 1. Pet., 37-39 (Evaluating Limitations [19a]-[19f] and omitting discussion of Limitation [19g]). Petitioner’s expert similarly omits Limitation [19g] from his declaration. EX1003, ¶¶116-124. There is no assertion or evidence that Cousins discloses *each and every limitation* of claim 19 and, therefore, Petitioner cannot legally establish anticipation of claim 19. *Net MoneyIN*, 545 F.3d at 1369 (To show anticipation the document must “describe every element of the claimed invention”).

B. Claim 16 Is Novel Over Cousins

While Petitioner’s discussion of claim 16 largely repeats the deficiencies found in Section V.A, above, the Petition includes additional, independent defects in its discussion of claim 16.

1. [16e] Petitioner Fails to Establish that Cousins Identifies Discrepancies Between the Request and the Scraping Strategy

Petitioner’s analysis of Limitation [16e] is identical to Limitation [1d] and must fail for the same reasons as explained in Section V.A.1. Pet., 35; *see* EX2001, ¶¶29-33.

2. [16g] Petitioner Fails to Establish that Cousins Sends the Adjusted Request Through a Proxy Selected by the Proxy Rotator According to the Scraping Strategy

For Limitation [16g], the Petition repeats a portion of its analysis of Limitation [1f], which fails for the same reasons as explained in Section V.A.2.

Independently, Limitation [16g] requires “a proxy selected from a proxy database *by the proxy rotator* according to the scraping strategy.” *Supra*, §II.A. Petitioner contends policy engine 116 corresponds to the claimed proxy rotator. Pet., 31-32. As explained in Section V.A.2 above for Limitations [1f] and [19f], policy engine 116 sends a request to outgoing queue 120, from which “*a minion 124* [the purported proxy] *will pull* the [highest priority] request.” EX1004, 13:3-5; *see* EX2001, ¶42. Thus, policy engine 116 [the purported proxy rotator] merely sends requests to the queue 120. *See* EX2001, ¶39. The Petition does not explain—and Cousins does not disclose—how a corresponding minion 124 is purportedly selected *by policy engine 116*. *See* Pet., 31-36; *see also* EX2001, ¶¶42-43. For at least this additional reason, Petitioner’s anticipation theory of Claim 16 must independently fail.

In addition to repeating its analysis of Limitation [1f], Petitioner also provides an additional citation to Cousins’ discussion of determining whether requested data “can be satisfied from the data stored in the [historical] database.” Pet., 35-36 (quoting EX1004, 3:24-26). Petitioner’s additional analysis for Limitation [16g] is

misguided and cannot remedy the deficiencies explained in Section V.A.2 above for Limitations [1f] and [19f]. *See* EX2001, ¶¶44-45.

To the extent Petitioner intends to map this historical database to the claimed “proxy database,” this is wrong. EX2001, ¶50. Cousins historical database 104 stores “web pages that have been previously retrieved by the crawler 144.” EX1004, 7:31-32. It does not store minions—Petitioner’s purported proxy (Pet., 32 (“minions, e.g., the proxies”). Thus, the Petition fails to identify a “proxy database.” EX2001, ¶50.

Additionally, Cousins explains that if the requested data is stored in historical database 104, then “the crawler will terminate the user-demanded crawl.” EX1004, 3:31-4:1; EX2001, ¶44. In this process where the user-demanded crawl is terminated, the request would not be sent to a target through a proxy and plainly cannot meet the claimed feature. *See* EX2001, ¶44; *supra* §§V.A.1, n.2; V.A.2.

Further, Petitioner’s citation to Cousins to support its conclusion that “a new crawl is requested based on the minion selection in the database” is patently false. Pet., 36 (citing EX1004, 4:1-3). The cited portion of Cousins recites “by maintaining a historical database, the crawler of the present invention can *avoid* crawls completely by satisfying a request from the historical database, thereby minimizing traffic on a target site.” EX1004, 4:1-3. That is, Cousins discloses “avoiding crawls

completely,” rather than sending a modified crawl. *Id.*; see EX2001, ¶45. For each of these reasons, Petitioner’s Ground 1 must fail.

3. [16c]/[16f] Petitioner Fails to Establish that Cousins Compares and Adjusts Parameters of a Request as Claimed

For Limitation [16c], the Petition repeats a portion of its analysis of Limitation [1b], which fails for the same reasons as explained in Section V.A.3.

Petitioner’s analysis of Limitation [16f] is identical to Limitation [1e] and must fail for the same reasons as explained in Section V.A.3.

Further still, Petitioner’s analysis of Limitation [16f] fails to include the theory that “the parameters of a request include a request for a specific item” (Pet., 23). See Pet., 31-33. Thus, even to the extent *any* weight is given to this theory for claims 1 or 19, it cannot be used to support Petitioner’s discussion of claim 16.

4. [16b]/[16c] Petitioner Does Not Identify a Proxy Rotator and a Request Optimizer

Petitioner identifies Cousins’ “policy engine 116” as corresponding to both the claimed “proxy rotator” and “request optimizer.” Pet., 31-34. This mapping is inconsistent with both the plain language of the claim, the description of the ’770 Patent, and well-settled legal precedent.

“Where a claim lists elements separately, the clear implication of the claim language is that those elements are distinct components of the claimed invention.” *Becton*, 616 F.3d at 1254 (quotations omitted); see *Engel Indus., Inc. v. Lockformer*

Co., 96 F.3d 1298 (Fed. Cir. 1996) (concluding that where a claim provides for two separate elements, these two elements “logically cannot be one and the same.”). When claim elements are listed separately there is “a presumption that those components are distinct.” *Kyocera Senco Indus. Tools v. Int’l Trade Comm’n*, 22 F.4th 1369, 1382 (Fed. Cir. 2022). Petitioner provides no evidence to overcome this presumption and, thus, Ground 1 analysis of claim 16 is legally deficient.

Further, the language in the written description does not support Petitioner’s theory. As explained in Section II and depicted in FIG. 1 of the ’770 Patent, the proxy rotator 106 and request optimizer 104 are distinct components. EX1001, 8:65-67; *see also id.*, 12:30-32 (“the Request Optimizer 104 asks the Proxy Rotator 106 for a particular proxy”). For these reasons, Cousin’s policy engine cannot disclose the claimed “proxy rotator” and “request optimizer.”

C. Petitioner Fails to Identify the Alleged Parameters in Cousins

Claim 1 recites a method which utilizes “parameters of a request received from a user device” at Limitation [1b] and “the parameters” are repeated in the steps found in Limitations [1c], and [1e]. §II.A. Claims 16 and 19 disclose similar limitations. *See* §II.A (Claim 16 Limitations [16c], [16d], [16f]); Claim 19 - Limitations [19b], [19c], [19e]). Yet, Petitioner fails to identify any portion of feature of Cousins that respond to the claimed parameters.

For Limitation [1b]⁴, the Petition alleges that “Cousins states that the parameters *of a request* include *a request* for a specific item, for example, ‘a policy engine is provided that receives a request for a specific item and assembles policies for the target site containing information about the specific item.’” Pet., 23. But that logic is circular and nonsensical. The request for an item cannot itself be a parameter of *that same* request. EX2001, ¶34. But the Petition maps a single request to both *the request* and *the parameters* of that same request. See Pet., 23 (“inputting *a request for a specific item* into a form ... discloses a user request”). But this interpretation is nonsensical and inconsistent with the law. *Becton, Dickinson and Co. v. Tyco Healthcare Gr., LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (“Where a claim lists elements separately, the clear implication of the claim language is that those elements are distinct components of the claimed invention.”) (quotations omitted).

To be clear, the Petition does not assert that the “specific item” of data within the request discloses the claimed parameters. The Petition provides a single conclusory assertion that “the parameters of a request include a request for a specific item” (Pet., 23) and then fails to ever mention this “specific item” again. See

⁴ Petitioner’s analysis of Limitations [1b], [1c], and [1e] is identical to Limitations [19b], [19c], and [19e], respectively.

Pet., 22-30.⁵ Moreover, even if Petitioner had named the specific item as one parameter, the mere identification of a single parameter is insufficient to disclose the specific claim language. *See e.g.*, §II.A (“comparing parameters,” “a scraping strategy corresponding to the parameters,” “adjusting the parameters”). Petitioner fails to disclose how the “specific item” is compared to any feature. EX2001, ¶¶35-36.

Further, Petitioner fails to even discuss or mention the parameters in its analysis of Limitations [1c], despite this element appearing in the claimed limitation. Pet., 24-25. For Limitation [1e], Petitioner and its expert make unverified conclusory statements that Cousins describes adjusting the parameters yet fails to identify what “parameters” in Cousins are allegedly adjusted. *See* Pet., 24-25; *supra* §V.A.3. Petitioner points to two examples of Cousins for allegedly disclosing “adjusting parameters,” neither of which are the “specific item” mentioned in Limitation [1b]. *See* EX2001, ¶37; *see also* Pet., 27-28; §V.A.3.

For these additional reasons, Petitioner’s Ground 1 is, at best, unclear and incomplete for each of independent claim 1, 16, and 19, and fails to provide the required particularity to support institution.

⁵ Even if it had, Petitioner does not include even this faulty mapping for “the parameters” in its analysis for claim 16 (Pet., 33-34). *See* §V.B.3.

VI. GROUND 2: THE PETITION FAILS TO SHOW OBVIOUSNESS OF CLAIMS 1, 10, and 19 OVER COUSINS

Petitioner's Ground 2 fails to provide any modification to Cousins' system and, instead, relies on a POSITA's understanding to include additional context of the system. This alleged knowledge of a POSITA fails to save any of Petitioner's theories.

Petitioner's Ground 2 merely incorporates its Ground 1 mapping, except for Limitations [1f], [1g], [16b], [16c], and [19f]. As explained above, Petitioner's Ground 1 includes deficiencies apart from these Limitations and, therefore, Ground 2 must fail for the same reasons. *See* §§V.A.1 (Limitations [1d] and [19d]), V.A.3 (Limitations [1b]/[1e] and [19b]/[19e]), V.A.4 (Limitation [19g]), V.B.1 (Limitation [16e]), V.B.2 (Limitation [16g]), V.B.3 (Limitation [16f]). Further still, Petitioner's additional analysis also fails to remedy the deficiencies found in Ground 1, as explained below.

A. [1f], [19f] Petitioner's Remarks Do Not Remedy the Deficiencies of its Ground 1

For each of Limitations [1f], [19f], Petitioner supplements its Ground 1 theory by alleging "[i]f the Board does not agree that Cousins discloses 'a proxy' then such a limitation would be common knowledge to a POSA." Pet., 49, 53-54. As explained in Section V.A.2, the Petition includes deficiencies that are independent

from Cousins' disclosure of "a proxy." Thus, Ground 2 must fail for the same reasons as Ground 1. *See* §V.A.2.

B. [16b] Petitioner Fails to Establish a POSITA Would Understand Cousins' Minions as a Proxy Rotator

1. Petitioner's Theory is Inconsistent

For Limitation [16b], "Petitioner incorporates by reference its discussion" of Ground 1, in which Petitioner alleges that Cousins' *policy engine 116* discloses the claimed proxy rotator (Pet., 31-33). Pet., 51. Petitioner then alleges that Cousins' *minions 124* disclose the claimed proxy rotator because "Cousins explicit reference to the [minions use of a] Squid proxy would be known by a person of ordinary skill in the art to be a proxy rotator." *Id.* Not only is this incorrect (EX2001, ¶¶46-52); but, the Petition's theory inconsistently maps two separate elements (policy engine 116 and minions 124) to the claimed proxy rotator for Ground 2. Because each of these elements requires a separate, mutually-exclusive theory, the Petition fails to "specify where each element of the claim is found in the prior art patents or printed publications relied upon," as required by 37 C.F.R. § 42.104(b)(4). As it is unclear whether the Petition intends to map Cousins' minions or its policy engine as the claimed proxy rotator, Petitioner's Ground 2 lacks particularity with respect to claim 16.

2. *Petitioner's New Theory Is Legally Insufficient*

Claim 16 recites “a proxy rotator operable to provide a plurality of proxies over the network” ([16b]) and “to send the adjusted request to a target through a proxy selected from a proxy database by the proxy rotator according to the scraping strategy” ([16g]). *See* §II.A.

For Ground 2, Petitioner changes its theory to identify minions 124 as the claimed proxy rotator for Limitation [16b]. *Compare* Pet., 31-32 (relying on policy engine as the proxy rotator for Ground 1) *with* Pet., 51-52 (relying on minions as the proxy rotator for Ground 2). However, in analyzing Limitation [16g], the Petition simply incorporates by reference its discussion from Ground 1, in which proxy engine 116 (not minions 124) was identified as the claimed proxy rotator. Pet., 53; §§V.B.2, VI.B.1. Petitioner fails to carry over its new mapping for Limitation [16b] into its discussion of Limitation [16g] for Ground 2. *See* Pet., 51-53. Thus, even if Petitioner's evaluation of Limitation [16b] were sufficient for Limitation [16b], Ground 2 must still fail because there is no evidence—much less explanation—that Cousins' minions select a proxy from a proxy database according to a scraping strategy, as required by Limitation [16g]. For at least this reason, Petitioner's Ground 2 must fail with respect to claim 16.

3. Petitioner's Analysis is Deficient

Notwithstanding the procedural issues above, Petitioner's analysis of claim 16 is deficient for its Ground 2. Petitioner contends that Cousins' minions may "use proxies (such as Squid)" and that "Cousins explicit reference to the Squid *proxy* would be known by a person of ordinary skill in the art to be a *proxy rotator*." Pet., 51. This theory is unsupported and based on a misunderstanding of the Squid proxy architecture. *See* EX2001, ¶46.

"Squid is a caching proxy for the Web supporting HTTP, HTTPS, FTP" that "has extensive access controls and makes a great server accelerator." EX2003, 1. The Squid proxy can be utilized in various different configurations depending on the specific network environment or system. EX2001, ¶¶48-49; EX1009, 29/468 (Professionals can "recommend a configuration *for your network environment*"); *id*, 200/468 ("Squid has many different ways to decide how and where requests are forwarded" that vary "[d]epending on your configuration"). For example, the Squid website identified by Petitioner discloses more than 90 different "configuration examples" for different scenarios and set-ups, including "[r]otating the Squid outbound IPs." EX2004, at 1-5; *see* EX2001, ¶51.

To start, the claimed proxy rotator selects a proxy from a proxy database. *Supra*, §II.A. Yet, the Petition fails to even mention such a proxy database. *See* Pet., 36, 53. Neither Cousins nor Squid disclose a proxy database and, therefore, the

Petition cannot show that Cousins or Squid teach “a proxy selected from a proxy database by the proxy rotator.” EX2001, ¶50; *supra* §V.B.2. Petitioner’s theory must fail for this reason alone.

Further, Petitioner’s reliance on the title of a wiki article related to a specific configuration of a squid proxy lacks the required explanation or analysis to establish that a POSITA would have understood Cousins’ general reference to the Squid proxy discloses the claimed proxy rotator. *See* EX2001, ¶51. The extent of Petitioner’s argument is that both “proxy rotator” and the cited website use a variation of the word “rotate.” Outside of that single word and the title of the wiki-entry, there is no other analysis or discussion of the Squid proxy website (EX1010), much less in the context of the ’840 Patent’s definition of the “proxy rotator.” Pet., 51-52. For example, Petitioner fails to analyze that this “weird” configuration would have “no actual useful benefits.” EX1010, at 1. But merely pointing to the title of a website that explains an example of how a Squid proxy *can be* configured fails to establish that a POSITA would understand that Cousins’ minions *would have been* configured in this same manner. *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1366 (Fed. Cir. 2016) (error to rely on common sense based merely upon “conclusory statements and unspecific expert testimony”). And it certainly does not establish a POSITA would have been motivated to configure Cousins’ minions in the manner described in Squid proxy website. *See* EX2001, ¶51; EX1010, at 1-2 (repeatedly stating “there

is no actual benefit from using” this configuration); *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (“Obviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.”) (emphasis in original).

Finally, Petitioner relies on a specific configuration in which the Squid is configured as “an origin server accelerator.” EX1009, 324-336/468 (“Chapter 15: Server Accelerator Mode”); *see* Pet., 51-52 (citing EX1009, 331/468⁶); EX2001, ¶52. In this configuration, the “Squid is operating as a surrogate” or reverse proxy, for “one, or maybe a few, origin server(s), rather than any and all origins.” EX1009, 324/468; *see* EX2005, 1 (“A reverse proxy or surrogate is a proxy server that is installed in a server network.”). In this role, when an origin server (or web server) utilizes many servers for a single web address, the Squid may rotate between the different origin servers that host the web address. EX1009, 331/468. That is, the Squid “select[s] the *backend server*” between multiple different web servers. *Id.*; *see* EX2001, ¶52. This configuration does not select *a proxy* through which a request is sent to the backend server nor does this configuration provide multiple proxies over a network. EX2001, ¶52. The cited evidence fails to support Petitioner’s theory that a POSITA would have understood Squid to be a proxy

⁶ Petitioner cites to local page 309, which is labeled as page 331/468

rotator. Accordingly, Petitioner's theory is unsupported and cannot establish obviousness. *TQ Delta, LLC v. CISCO Sys., Inc.*, 942 F.3d 1352, 1358-59 (“[The Federal Circuit has] repeatedly recognized that conclusory expert testimony is inadequate to support an obviousness determination on substantial evidence review.”).

Further, the cited configuration is quite different than Cousins' set-up in which minions 124 are configured to crawl all types of servers. EX2001, ¶52; EX1004, 14: 27-31 (“Minions 124 are preferably implemented to execute on servers 700 or other computing devices that reside anywhere.”). A citation to a particular Squid configuration does not show that the cited configuration could be or would have been implemented into systems with distinct network architectures. *See* EX1009, 326/486 (“Technically, a single configuration file directive is all it takes to change Squid from a caching proxy into a surrogate. Unfortunately, life is never quite that simple. Due to the myriad of ways that different organizations design their web services, Squid has a number of directives to worry about”). For the same reasons, Petitioner's citations to specific Squid configurations fails to establish that Cousins' minions would be configured in this manner or that it would have been obvious to modify Cousins' system be configured as a server accelerator (EX1009, 324/468) or in a “weird” configuration that would have “no actual useful benefits” (EX1010, at 1). EX2001, ¶¶48-52. For the above reasons, this theory must fail.

VII. GROUND 3: THE PETITION FAILS TO SHOW OBVIOUSNESS OF CLAIMS 1, 16, and 19 OVER COUSINS & TAYLOR

For Petitioner’s Ground 3, the Petitioner incorporates its analysis for Ground 1—without additional discussion—into every limitation, except Limitations [1f], [16c], [16g], and [19f]. Pet., 62-67. As explained above, Petitioner’s Ground 1 includes deficiencies apart from these Limitations and, therefore, Ground 3 must fail for the same reasons. *See* §§V.A.1 (Limitations [1d] and [19d]), V.A.3 (Limitations [1b]/[1e] and [19b]/[19e]), V.A.4 (Limitation [19g]), V.B.1 (Limitation [16e]), V.B.3 (Limitation [16f]), VI.B (Limitation [16b]).

A. [1f], [19f] Petitioner’s Remarks Do Not Remedy the Deficiencies of its Ground 1

For each of Limitations [1f], [19f], Petitioner supplements its Ground 1 theory by alleging “[i]f the Board does not agree that Cousins discloses ‘a proxy’ then such a limitation would be obvious under Cousins in view of Taylor.” Pet., 62, 66-67. As explained in Section V.A.2 above for Limitations [1f] and [19f], the Petition includes deficiencies that are independent from Cousins’ disclosure of “a proxy.” Thus, Ground 3 must fail for the same reasons as Ground 1. *See* §V.A.2.

B. [16g] Petitioner’s Remarks Do Not Remedy the Deficiencies of its Ground 1

For Limitation [16g], Petitioner supplements its Ground 1 theory by alleging “[i]f the Board does not agree that Cousins, or Cousins in view of the common knowledge of a POSA, discloses ‘a proxy selected from a proxy database’ then such

a limitation would be obvious under Cousins in view of Taylor.” Pet., 65. As explained in Section V.B.2 above for Limitation [16g], the Petition includes deficiencies that are independent from Cousins’ disclosure of “a proxy.” Thus, Ground 3 must fail for the same reasons as Ground 1. *See* §V.B.2.

C. Petitioner’s Combination of Cousins and Taylor is Deficient

The obviousness inquiry typically requires an analysis of “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (requiring “articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). Petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements,” but “must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *Magnum Oil Tools*, 829 F.3d at 1380 (Fed. Cir. 2016). For at least the reasons explained below, Petitioner’s combination must fail.

The Petition fails to show that it would be obvious to combine or modify Cousins’ crawling process and system with Taylor’s disclosure. Petitioner starts by asserting that:

A POSA would have recognized that there are advantages to using proxies from Internet Service Providers that allows for a large network to more effectively crawl and retrieve information from target web

sites. Thus, it would have been obvious to adapt and expand Cousins to incorporate the service provider proxies and infrastructure taught by Taylor.

Pet., 60 (citing EX1003, ¶207. But this single sentence of “motivation” is simply the unsupported, unexplained testimony of Petitioner’s expert, which has been repeatedly held to be “inadequate to support an obviousness determination on substantial evidence review.” *TQ Delta, LLC v. Cisco Sys.*, 942 F.3d 1352, 1359; EX1003, ¶207 (citing no independent evidence). Petitioner’s additional analysis of any combination of Cousins and Taylor is similarly unsupported. *See* Pet., 61 (citing EX1003, ¶¶209-211); EX1003, ¶¶209-211 (citing no independent evidence).

In fact, the expert declaration is an exact restatement of the Petition’s arguments without any additional explanation or supporting evidence, the only difference being the inclusion of “in my opinion” in the declaration. *Compare* Pet., 60-61 *with* EX1007, ¶¶205-211. Dr. Williams’ Declaration does not cite to any additional evidence or provide any additional context or reasoning to support the purported advantages, expectation of success, motivations to combine, or predictable results *conclusions* of the Petition. *Id.* For example, Petitioner’s expert concludes the combination purportedly “yields predictable results” that “increase[] amounts of proxies and performance.” EX1003, ¶211. However, there is no discussion as to *how* or *why* the combination would yield an increased amount of proxies or increased

performance. And the only discussion of Taylor fails to reference the amount of proxies or any improved or increased performance. *See* EX1007, ¶¶205-211. The declaration does not provide any technical detail, explanation, or statements supporting why the expert believes these results would occur, or why a POSITA would have recognized any of the alleged advantages. Such testimony—relying exclusively on conclusory assertions—is entitled to little weight. *Xerox*, IPR2022-00624, Paper 12 at 5.

For at least this additional reason, Ground 3 must fail.

VIII. GROUNDS 4 AND 5 DO NOT SAVE THE PETITION’S DEFICIENCIES REGARDING THE INDEPENDENT CLAIMS

Neither of Petitioner’s Ground 4 or 5 relate to independent claims 1, 16, and 19. Pet., 72-78. Therefore, Ground 4 and Ground 5 cannot provide an independent basis for institution. As each of Grounds 1-3 fail to show a reasonable likelihood that the petitioner would prevail as to at least one of the independent claims, the Board should deny institution.

IX. CONCLUSION

For the reasons explained above, the Board should deny institution because Petitioner has not established any reasonable likelihood of success on any of its proposed grounds.

Dated: August 30, 2023

Respectfully submitted,

/Eagle H. Robinson/

Eagle H. Robinson

Reg. No. 61,361

Lead Counsel for Patent Owner

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(a)(i), the undersigned certifies that this Paper—exclusive of the table of contents, table of authorities, certificate of service, and this certificate of word count—includes 8,895 words. The undersigned relies upon the word count generated by Microsoft Word.

/Eagle H. Robinson/
Eagle H. Robinson (Reg. No. 61,361)

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on August 30, 2023, complete copies of Patent Owner Preliminary Response and EX2001-EX2006 were served on Petitioner via email (by consent), at the following email address(s):

tomd@cherianllp.com

rmolitors@cherianllp.com

elizabetho@cherianllp.com

/Eagle H. Robinson/

Eagle H. Robinson, Reg. No. 61,361