

United States District Court
Northern District of California

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

RADWARE, LTD., et al.,
Plaintiffs,
v.
F5 NETWORKS, INC.,
Defendant.

Case No. 5:13-cv-02024-RMW

**ORDER RE: F5'S RENEWED MOTION
FOR SUMMARY JUDGMENT OF NON-
INFRINGEMENT**

REDACTED PUBLIC VERSION

Re: Dkt. No. 278, 305

Defendant F5 Networks, Inc. renews its previous motion seeking summary judgment that the post-“hotfix” versions of F5’s accused products do not infringe claim 24 of U.S. Patent No. 8,266,319 (the “’319 Patent”).¹ Dkt. No. 278. Defendant Radware filed an opposition, Dkt. No. 289-3, and F5 filed a reply, Dkt. No. 303. The court held a hearing on F5's motion on January 8, 2016. Having considered the parties’ submissions, the record in this case, and the relevant law, the Court hereby GRANTS F5’s motion.

¹ Originally, F5’s motion was directed to additional patents and claims, but the parties subsequently stipulated that Radware would not assert those claims at trial. Dkt. Nos. 341, 354. Accordingly, at the parties’ request, this order addresses only Claim 24 of the ’319 patent.

1 **I. BACKGROUND**

2 **A. Asserted Patents**

3 Radware alleges that F5 infringes certain claims of U.S. Patent Nos. 8,266,319 (the “’319
4 Patent”) and 8,484,374 (the “’374 Patent”), both of which relate to link load balancing in a multi-
5 homed environment, that is, a network with multiple connections to the Internet. See ’319 col.15
6 ll.34–37. “Link load balancing” is a process for allocating network communications across these
7 connections. Outbound link load balancing deals with requests sent from a host that are destined
8 for an external network via the Internet. Inbound link loading involves inbound requests for
9 services received by the host via the Internet. Claims 24-28 of the ’319 Patent are directed to
10 outbound link load balancing. Claims 1-23 and 29-32 of the ’319 Patent and all claims of the ’374
11 Patent are generally directed to inbound link load balancing.

12 The only claim at issue here, claim 24 of the ’319 Patent, describes a device for outbound
13 link load balancing:

14 24. A routing device for routing data via a network from a first node
15 to a second node, said network having a plurality of available routes
16 from said first node to said second node and the plurality of routes
17 are assigned with respective IP addresses, said routing device
18 comprising:

19 a route selector operable to select one of said routes for
20 sending data between said first node and said second node on
21 the basis of costing information of said respective routes; and

22 a network address translator operable to receives a packet
23 having a source IP address and translating the source IP
24 address to an IP address corresponding to the selected route
25 of the plurality of routes.

26 Radware asserts both apparatus and method claims against F5.

27 **B. Accused Products**

28 Radware accuses F5’s “BIG-IP Application Delivery Controller” of infringement. The
infringement issues focus on three software modules within F5’s BIG-IP product: the Link
Controller, Local Traffic Manager (“LTM”), and Global Traffic Manager (“GTM”). Dkt. No. 179-
3 at 10-11. Radware claims that these modules implement the claimed link load balancing feature.

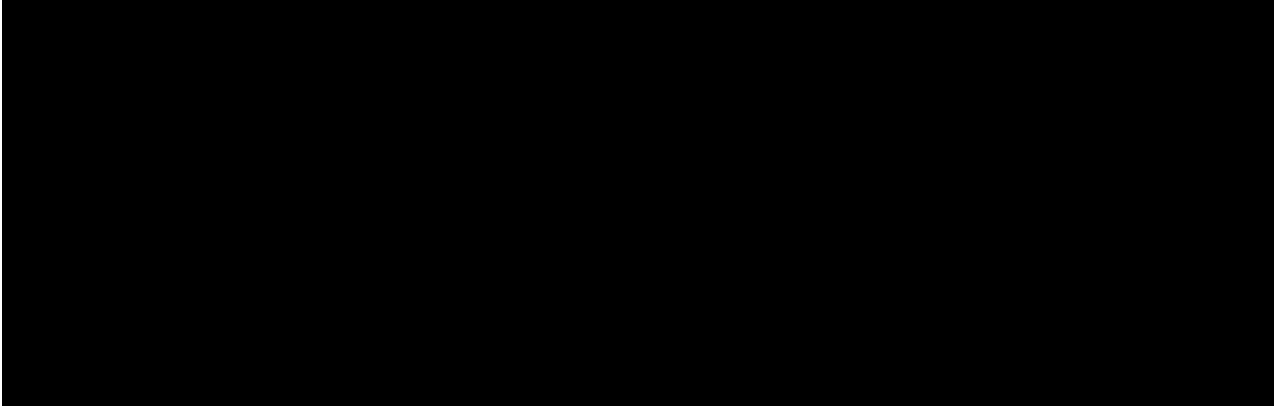
Link Controller’s “primary purpose is to provide, in part, ISP link load balancing
functionality,” but Link Controller is being discontinued in the United States. Dkt. No. 190 at 3.

1 “LTM’s primary functionality is local server load balancing, not ISP link load balancing. In
2 particular, an LTM can sit between a local network and the internet, and control the routing of
3 incoming messages to different servers.” Dkt. No. 184-3 (Brewer Decl.) ¶ 8. “GTM’s primary
4 functionalities are to provide DNS-related services and global server load balancing (‘GSLB’).
5 DNS services relate to responding to client requests for IP addresses associated with a domain
6 name (e.g., ‘Amazon.com’).” Id. ¶ 9.

7 **C. The Hotfix**

8 In late 2014, F5 made changes to the software on the accused products via a “hotfix,”
9 purportedly to remove the functionality Radware accuses of infringement.² Dkt. No. 278 at 2.
10 With respect to claims 24-28 of the ’319 Patent, F5 asserts that the hotfix removed the ability of
11 the accused LTM and Link Controller products from load balancing multiple ISP links using
12 “costing information of said respective routes.” Dkt. No. 278 at 2; see also Dkt. No. 277-3 ¶¶ 9-
13 10. In support of its motion, F5 submitted declarations and deposition testimony from Peter
14 Thornewell, the designer of much of the code for the hotfix.³

15 If F5 customers want to restore the functionality that was lost with the hotfix, they can
16 download a software patch from F5. Dkt. No. 303-2 (Brewer Decl.) ¶ 4. The patch, however, is
17 only available to customers outside the United States, id., and very few foreign customers have
18 requested the patch, Dkt. No. 303 at 10 n.4.



26 ² [REDACTED] only the 2014 hotfix is at issue
27 in F5’s motion. Dkt. No. 277-2 at 1 n.1.
28 ³ See generally Dkt. Nos. 277-3 (sealed declaration); 278-3 (redacted declaration); 277-4 (sealed
deposition excerpt); 302-6 (sealed reply declaration); 303-1 (redacted reply declaration).

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D. Procedural History

F5 originally moved for summary judgment of non-infringement on the claim at issue in the present motion (as well as other claims) on May 29, 2015. Dkt. No. 190. On October 15, 2015, the court denied F5’s motion without prejudice because F5 had not yet produced the source code for its hotfix to Radware. Dkt. No. 294 at 37. The court ordered F5 to provide the source code and make its author available for deposition, and the court indicated that F5 would have the opportunity to renew its motion once supplemental discovery was complete. Id. at 36-37. Now that supplemental discovery is complete, F5 renews its motion.

F5’s motion argues that the post-“hotfix” versions of F5’s LTM and Link Controller products do not infringe claim 24 of the ’319 Patent. Dkt. No. 278 at 1. On December 3, 2015, Radware filed an opposition, Dkt. No. 289-3, and on December 10, 2015, F5 filed a reply, Dkt. No. 303. On January 7, 2016, the parties filed a stipulation indicating that Radware was no longer pursuing any of the claims on which F5 was moving for summary judgment except for claim 24. Dkt. No. 341. On January 8, 2016, the court held a hearing on F5’s motion. At the hearing, the parties indicated that further negotiations might result in a stipulation that would make it unnecessary for the court’s summary judgment decision to address the alleged existence of a “bandwidth” mode of operation in F5’s accused products. On January 18, 2016, the parties filed a joint submission to inform the court that they were unable to reach such a stipulation and to clarify their positions with regard to the purported “bandwidth” mode. Dkt. No. 354.

II. ANALYSIS

A. Radware’s Surreply and F5’s Response

On December 13, 2015, Radware filed a motion for leave to file a surreply, claiming that F5’s reply brief included new arguments and evidence that were not part of F5’s original motion. Dkt. Nos. 305, 304-5. F5 responded that it “wants the Court to be fully informed on the issues raised and has no objection to the filing of the sur-reply.” Dkt. No. 313-3 at 1. The court is reluctant to accept serial submissions, as they delay decisions on the merits and violate Civil Local

1 Rule 7-3(d). F5 could and should have included the additional case law citations and details
2 regarding how the hotfix works in its opening brief rather than in reply, eliminating the need for
3 any surreply. Nevertheless, the court finds that in this instance, the parties' submissions that
4 followed their opening papers helped to crystalize the disputed issues. Accordingly, Radware's
5 unopposed motion for leave to file a surreply, Dkt. No. 305, is GRANTED.

6 **B. Legal Standard**

7 Summary judgment on patent infringement is a two-step analysis. "First, the claims of the
8 patent must be construed to determine their scope. Second, a determination must be made as to
9 whether the properly construed claims read on the accused device." *Pitney Bowes, Inc. v. Hewlett-*
10 *Packard Co.*, 182 F.3d 1298, 1304 (Fed. Cir. 1999) (internal citation omitted). "[S]ummary
11 judgment of non-infringement can only be granted if, after viewing the alleged facts in the light
12 most favorable to the non-movant, there is no genuine issue whether the accused device is
13 encompassed by the claims." *Id.* at 1304. It is not the task of the court to scour the record in search
14 of a genuine issue of triable fact. *Keenan v. Allen*, 91 F.3d 1275, 1279 (9th Cir. 1996). The
15 nonmoving party has the burden of identifying, with reasonable particularity, the evidence that
16 precludes summary judgment. *Id.*

17 **C. Claim 24 of the '319 Patent**

18 The parties do not dispute how F5's hotfix works. Thus, the central dispute before the
19 court is whether F5's post-hotfix accused products meet each limitation of each asserted claim.

20 **1. Presence of the Accused Code**

21 This court's previous summary judgment order explained the standard governing
22 infringement of device claims such as those at issue here in which software is accused of
23 infringement. The court concluded that "F5's accused BIG-IP products may infringe the Asserted
24 Patents if the products include programs that carry out, or are configured to carry out, the claims
25 of the Asserted Patents." Dkt. No. 294 at 37-38 (citing *Finjan, Inc. v. Secure Computing Corp.*,
26 626 F.3d 1197 (Fed. Cir. 2010), and *Fantasy Sports Properties, Inc. v. Sportsline.com, Inc.*, 287
27 F.3d 1108 (Fed. Cir. 2002)). The court reiterated that "to infringe, an accused product must be

1 delivered configured to perform the claimed functions.” Id. at 39.

2 In Finjan, the Federal Circuit analyzed claims of infringement by three accused computer
3 security products. 626 F.3d at 1201-02. The products contained source code for eight software
4 modules, but the modules were not executable without a license key. Id. at 1202. As the Finjan
5 court explained: “The eight modules are ‘locked’ when the three products are sold, requiring a
6 customer to purchase a separate key to activate each individual module. Therefore, a customer
7 who purchases an accused product can activate all, some, or none of the eight modules at different
8 cost.” Id. Applying the rule from Fantasy Sports that “in every infringement analysis, the language
9 of the claims, as well as the nature of the accused product, dictates whether an infringement has
10 occurred,” 287 F.3d at 1118, the Finjan court analyzed the specific claim language at issue:

11 Finjan’s non-method claims describe capabilities without requiring
12 that any software components be “active” or “enabled.” The system
13 claims recite software components with specific purposes: “a logical
14 engine for preventing execution”, “a communications engine for
15 obtaining a Downloadable”, or “a linking engine . . . for forming a
16 sandbox package”. . . This language does not require that the
17 program code be “active,” only that it be written “for causing” a
18 server or a computer to perform certain steps.

19 Finjan, 626 F.3d at 1204-05 (citations omitted). The Federal Circuit found that the accused
20 products, which contained the “software for performing the claimed functions” when sold,
21 infringed the asserted patents:

22 The code for proactive scanning was “already present” in
23 Defendants’ accused products when sold. There is no evidence that
24 customers needed to modify the underlying code to unlock any
25 software modules. The fact that users needed to “activate the
26 functions programmed” by purchasing keys does not detract from or
27 somehow nullify the existence of the claimed structure in the
28 accused software.

Id. at 1205.

Radware argues that F5’s hotfix is analogous to the activation and licensing mechanism
that did not save the Finjan defendants from infringement. Radware asserts that “the post-hotfix
BIG-IP devices continue to infringe at least apparatus claims 3-12, 24, 25, 29, 30, and 32 of the
'319 Patent because they are supplied with the same programming as the pre-hotfix version of

1 those products.” Dkt. No. 289-3 at 6. Specifically, Radware asserts that “the hotfix does not
2 remove the programming accused of infringing; it retains the pre-hotfix code for link load
3 balancing based on cost, route, and proximity.” Id. at 4; see also Dkt. No. 296-1 (Rubin Decl.) ¶ 8.
4 Because the accused code is still present after the hotfix, Radware argues, there is infringement
5 even if the accused lines of code cannot be executed without installing a patch. According to
6 Radware, “the claim elements are satisfied by the presence of the pre-hotfix programming retained
7 by the post-hotfix devices.” Dkt. No. 289-3 at 11-12.

8 In response, F5 argues that “[t]he relevant case law makes a distinction between activation
9 without modification of the code, for example by a license key, and ‘activation’ that requires
10 modification of the underlying code.” Dkt. No. 303 at 5. F5 notes that in *Finjan and Fantasy*
11 *Sports*, the Federal Circuit explained that “[i]nfringement occurred because the code ‘was written
12 in such a way as to enable a user of that software to utilize the function . . . without having to
13 modify that code.’” *Finjan*, 626 F.3d at 1205 (citing *Fantasy Sports*, 287 F.3d at 1118). F5 relies
14 on *Nazomi Communications, Inc. v. Nokia Corp.*, 739 F.3d 1339 (Fed. Cir. 2014) for the
15 proposition that devices that require a user to unlock functionality by adding to or modifying the
16 device’s source code do not directly infringe. Dkt. No. 303 at 5. In *Nazomi*, the Federal Circuit
17 affirmed an order granting summary judgment of non-infringement where the “purchase and
18 installation of the JTEK software”—a component required for infringement— “clearly
19 constitute[d] a ‘modification’ of the accused products.” 739 F.3d at 1345. F5 compares its patch
20 that restores link load balancing to the JTEK software in *Nazomi* and argues that there is no
21 genuine issue of fact that the post-hotfix products require modification to perform the relevant
22 functionality. Dkt. No. 303 at 7. Accordingly, without the patch, which is only available outside
23 the United States, F5 argues that its products cannot infringe.

24 The court finds that *Nazomi* is factually distinguishable from the case at bar. *Nazomi* dealt
25 with claims that accused a software and hardware combination of performing the claimed
26 function, where the software was sold (and subsequently installed) separately from the hardware
27 that defendants sold. Id. at 1343, 1345-46. Under those facts, the *Nazomi* court held that “[t]he

1 installation of JTEK software is not unlocking existing functionality, but adding new functionality
2 not currently present.” Id. at 1346. In this case, by contrast, the accused software code [REDACTED]

3 [REDACTED]
4 Comparing the Radware claims at issue in its previous summary judgment order to those in
5 Finjan, this court ruled that “if the software preloaded onto the BIG-IP products is configured to
6 perform the claimed functions, the BIG-IP products may be infringing” even if the software at
7 issue was not yet accessible to the user until licensed. Dkt. No. 294 at 41. The court emphasized,
8 however, that not all asserted claims were at issue in its previous summary judgment decision. Id.
9 at 38 n.21. Accordingly, a separate claim analysis is required here. See *Fantasy Sports*, 287 F.3d at
10 1118 (holding that “in every infringement analysis, the language of the claims, as well as the
11 nature of the accused product, dictates whether an infringement has occurred”).

12 As explained below, the court finds that the claim on which F5 presently moves for
13 summary judgment of non-infringement is distinguishable from those at issue in Finjan. In that
14 case, the claims recited software components with specific **purposes**: “a logical engine **for**
15 preventing execution”, “a communications engine **for** obtaining a Downloadable”, or “a linking
16 engine . . . **for** forming a sandbox package.” 626 F.3d at 1204 (emphasis added) (citations
17 omitted). The claim language at issue did not require “that any software components be ‘active’ or
18 ‘enabled.’” Id. In contrast, the claim for which F5 seeks summary judgment requires code with
19 more than a mere purpose.

20 Independent claim 24 of the ’319 Patent recites (emphasis added):

21 24. A routing device for routing data via a network from a first node
22 to a second node, said network having a plurality of available routes
23 from said first node to said second node and the plurality of routes
are assigned with respective IP addresses, said routing device
comprising:

24 a route selector **operable to select one of said routes** for
25 sending data between said first node and said second node
on the basis of costing information of said respective
routes; and

26 a network address translator operable to receives a packet
27 having a source IP address and translating the source IP
28 address to an IP address corresponding to the selected route
of the plurality of routes.

1 F5 argues that the hotfix disables the ability for GTM and Link Controller to balance between
2 links based “costing information.” Dkt. No. 278 at 5. Radware argues that F5 still infringes
3 because “the post-hotfix device possesses the same programming as the pre-hotfix device found
4 infringing by the Court.” Dkt. No. 289-3 at 8.

5 The language of claim 24 explicitly requires that an infringing device must be “operable to
6 select one of said routes . . . on the basis of costing information.” [REDACTED]

7 [REDACTED]
8 [REDACTED] Radware cites no evidence to suggest that F5’s code that Radware has accused of
9 performing cost-based load balancing is “operable” post-hotfix. Thus, the court finds it undisputed
10 that no code even accused of performing cost-based load balancing—with the possible exception
11 of the functionality that allegedly performs “bandwidth” load balancing, addressed below—is
12 executed in post-hotfix products.

13 **2. Bandwidth Mode**

14 Radware argues that the accused products infringe by utilizing bandwidth to perform load
15 balancing. The court previously denied F5’s motion for summary judgment of non-infringement in
16 part because while Radware failed to identify source code in the accused products implementing
17 the supposed bandwidth metric, and F5’s engineer Thornewell denied the existence of such a
18 metric, Dkt. No. 188-5 ¶ 15, Radware pointed to F5 documentation, e.g., Dkt. No. 289-9 at 19,
19 indicating the existence of bandwidth load balancing. Dkt. No. 294 at 45.

20 In support of its renewed motion for summary judgment, F5 submitted additional
21 declarations and deposition testimony from Thornewell clarifying the operation of the accused
22 products. See Dkt. No. 277-3 ¶¶ 9-11; Dkt. No. 277-4 at 281:8-283:25. Thornewell asserts, based
23 on his review of the F5 source code and documentation, that “‘Bandwidth’ has never been
24 implemented as a load balancing metric for either LTM or the GTM.” Dkt. No. 277-3 ¶ 9.

25 Specifically, he explains that in the accused products, [REDACTED]
26 [REDACTED]
27 [REDACTED]

1 [REDACTED] Id. ¶ 11. Thornewell’s description of how
2 the accused products operate is actually consistent with the description Radware’s expert provided
3 in his opening infringement report:

4 The Bandwidth method balances traffic over the links based on
5 throughput thresholds. The Bandwidth method uses a primary link
6 until a traffic threshold has been met. After the threshold is met,
7 BIG-IP directs traffic to another link, and when traffic falls below
8 the threshold, BIG-IP re-directs traffic back to the primary link.

9 Dkt. No. 221-2 (Rubin Rep.) ¶ 128. The descriptions above are also consistent with F5’s “Big-IP®
10 Link Controller™ Implementations” guide: “In bandwidth load balancing, Link Controller uses a
11 specific link until a traffic threshold has been met. After that threshold is met, the Link Controller
12 shifts traffic to another link.” Dkt. No. 289-9 at 19. Thus, as with the hotfix, the parties’ dispute is
13 not how the accused products operate, but whether the undisputed functionality infringes.⁴

14 Comparing the undisputed functionality described above to the claim language, the court
15 finds that the accused features that involve bandwidth do not “select” a link based on “costing
16 information of said respective routes.” Even assuming that “costing information” includes the
17 “cost” of bandwidth, the functionality described above does not meet the claim language because
18 Radware has presented no evidence that the accused products compare bandwidth utilization
19 between routes and then select a particular route based on bandwidth. Rather, the undisputed
20 evidence in the record indicates that the accused products will (1) designate a particular link as
21 unavailable for further use if its traffic exceeds a particular threshold and (2) switch to a secondary
22 link without comparing the bandwidth utilization of the secondary link to that of the first. The
23 functionality described does not involve “select[ing] one of said routes . . . on the basis of costing
24 information of said respective routes” because at most, the bandwidth of the primary link, not the
25 secondary link, determines which link is utilized.

26 Radware cites no evidence suggesting that Thornewell’s description of how the accused

27 ⁴ The court notes that the documentation’s use of the term “bandwidth load balancing” is not
28 dispositive. Rather, the question is whether the accused products themselves actually contain each
limitation of the asserted claims.

1 products operate is incorrect. Radware submitted a declaration from its expert Dr. Rubin in
2 support of Radware’s opposition to F5’s renewed motion, but Rubin’s declaration does not
3 address “bandwidth” mode other than to generically cite the documentation already discussed
4 above. See Dkt. No. 296-1. Radware and its expert provide no new technical analysis related to
5 “bandwidth mode” to refute Thornewell’s November 13, 2015 declaration, Dkt. No. 277-3.
6 Instead, Radware incorrectly asserts that “[t]he record has not changed” and rests on the
7 arguments it made in opposition to F5’s original motion. Dkt. No. 289-3 at 11. It is possible that
8 Radware may possess evidence that, if cited, would raise a genuine dispute of fact on whether
9 Radware has met its burden of proving infringement, but Radware cited no such evidence.⁵

10 Because the undisputed evidence shows that Radware has not met its burden of proving
11 infringement, the court GRANTS F5’s motion for summary judgment of non-infringement as to
12 claim 24 of the ’319 patent by post-hotfix products. Moreover, the court also DENIES Radware’s
13 request to extend the previous grant of summary judgment of infringement of claim 24 by pre-
14 hotfix products to cover post-hotfix devices as well. See Dkt. No. 289-3 at 8.

15 **III. ORDER**

16 For the reasons explained above, F5’s renewed motion for summary judgment of non-
17 infringement is GRANTED as to the accused products for claim 24 of the ’319 Patent.

18 Radware’s unopposed motion for leave to file a surreply, Dkt. No. 305, is GRANTED.

19 The court does not believe that anything in this order reveals confidential information.
20 However, in an abundance of caution, the court is publicly filing a redacted version, with portions
21 of the order relating to subject matter that the parties have sought to keep under seal redacted. The
22 court has filed an unredacted copy of this order under seal. If a party believes that the redacted
23 portion discloses confidential information, it must file a version of the order with proposed
24 redactions and provide a declaration setting forth the bases for asserting confidentiality. The

25 _____
26 ⁵ The court notes that while Radware asserts that “Dr. Rubin had identified source code describing
27 how the accused product uses bandwidth to balance ISP links,” Dkt. No. 354 at 2, the materials
28 cited in support of Radware’s assertion do not actually discuss source code. See Dkt. No. 200-4
(Radware opposition brief) at 8; Dkt. No. 221-2 (Rubin Rep.) ¶¶ 126-29.

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declaration and proposed redactions may be filed under seal. The court will evaluate any such confidentiality contention and make a decision whether to approve the proposed redaction or to remove it, thus rendering the underlying content public. Any proposed redactions and declarations in support must be filed within 14 days of the date of this order. Thereafter, a copy of this order with the approved redactions will be made public.

IT IS SO ORDERED.

Dated: February 2, 2016



Ronald M. Whyte
United States District Judge