

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

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T.M. PATENTS, L.P., and))
T.M. CREDITORS LLC,))
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Plaintiffs,))
))
v.)	CIVIL ACTION
)	NO. 12-11418-WGY
CISCO SYSTEMS, INC.))
))
Defendant.))
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MEMORANDUM AND ORDER

YOUNG, D.J.

November 14, 2013

I. INTRODUCTION

In the present case, plaintiffs T.M. Patents, L.P. and T.M. Creditors LLC (collectively, "T.M. Patents") charge the defendant, Cisco Systems, Inc. ("Cisco"), with infringement of U.S. Patent No. 5,212,773 ("the '773 Patent"), titled "Wormhole Communications Arrangement for Massively Parallel Processor." This memorandum addresses three motions brought by the parties: (1) a motion for summary judgment of non-infringement brought by Cisco, (2) a motion for partial summary judgment brought by Cisco to limit damages, and (3) a cross-motion for partial summary judgment brought by T.M. Patents.

A. Procedural Posture

T.M. Patents, the owner of the '773 Patent, commenced this litigation against Cisco in August 2012. See Compl. & Jury Demand, ECF No. 1. This Court held a Markman hearing on June 7, 2013, during which it construed certain claims in a decision orally delivered from the bench. See Tr. Markman Hr'g 27:9-28:16, ECF No. 67 ("Markman Tr."). The Court entered an order memorializing the constructions on June 18, 2013. Order ("Markman Order"), ECF No. 69.

Shortly thereafter, Cisco filed its first motion for summary judgment, requesting partial summary judgment to limit the scope of damages based on T.M. Patents' alleged failure to comply with federal statutory marking requirements and provide Cisco with actual notice of infringement before the expiration of the patent-in-suit. Cisco Sys. Inc.'s Notice Mot. & Mot. Summ. J., ECF No. 73; Def. Cisco Sys. Inc.'s Mot. Partial Summ. J. Limit Damages, ECF No. 74. T.M. Patents responded by cross-moving for partial summary judgment on the marking issue, asking the Court to rule that T.M. Patents did not violate its obligation to mark devices practicing the '773 Patent. Pls. T.M. Patents, L.P. & T.M. Creditors LLC's Notice Cross-Mot. Partial Summ. J. Marking Issue, ECF No. 109; Pls. T.M. Patents, L.P. & T.M. Creditors LLC's Cross-Mot. Summ. J. Marking Issue, ECF No. 112. Overlapping with this activity, Cisco moved for summary judgment of non-infringement. Cisco Sys. Inc.'s Notice Mot. &

Mot. Summ. J. Non-Infringement, ECF No. 106; Def. Cisco Sys. Inc.'s Mot. Summ. J. Non-Infringement ("Def.'s Non-Infringement Mem."), ECF No. 107. The Court heard oral arguments on all three motions on October 10, 2013, and took the case under advisement. Elec. Clerk's Notes, ECF No. 136; see Tr. Mot. Hr'g, ECF No. 140. The parties subsequently entered alternative dispute resolution proceedings held before Magistrate Judge Bowler, but her report was that further settlement efforts would be unlikely to be productive. See Report Re: Reference for Alternative Dispute Resolution, ECF No. 160.

B. Undisputed Facts

1. U.S. Patent No. 5,212,773

The patent in suit, "Wormhole Communications Arrangement for Massively Parallel Processor," teaches a system for transmitting computer messages across a processor network using wormhole routing, also referred to as cut-through routing or cut-through switching. Pls.' T.M. Patents, L.P. & T.M. Creditors LLC's Opening Claim Construction Br. U.S. Patent Nos. 5,212,773 ("Pls.' Opening Markman Br.") 2, ECF No. 46.¹

Wormhole routing is a method of transmitting messages quickly from one network device to another. When a message

¹ The internet itself faces a roughly analogous communications challenge. For a lucid, understandable description of the issue, see Molly K. Raskin, No Better Time 17-19, 56-60 (2013).

travels across a network, it passes through network nodes, computer devices like message routers or servers, which read the message's destination address and forward the message on to the next appropriate way station in the network. See T.M. Patents, L.P. v. International Bus. Mach. Corp., 72 F. Supp. 2d 370, 392 (S.D.N.Y. 1999) ("IBM Markman"). Destination information is contained in a message's head and is the first part of a message to arrive at any network node. See Pls.' Opening Markman Br. 2. When a message router uses wormhole routing, it decodes the head of a message and begins forwarding before it has received the rest of the message. Id. This represents an improvement over prior art, a store-and-forward system in which a message would not be forwarded until it had been received in its entirety. IBM Markman, 72 F. Supp. 2d at 392-93.

At present, only infringement of Claims 1 and 9 of the '773 patent are in dispute. See Pls. T.M. Patents, L.P. & T.M. Creditors LLC's Am. Supplemental Infringement Disclosures, App'x. A, Pls.' Supplemental Infringement Disclosures - U.S. Patent No. 5,212,773 ("Am. Supplemental Infringement Disclosures"), ECF No. 84-1; Def.'s Non-Infringement Mem. 3. Claim 1 teaches "[a] computer system comprising a plurality of processing elements and a messaging router" that uses a particular process to achieve wormhole routing. Am. Supplemental Infringement Disclosures at 1. Claim 9 teaches "[a] message

router for connection to a plurality of processing elements to form a computer system" which uses the same wormhole routing process. Id. at 8.

2. The Accused Devices

T.M. Patents identifies two Cisco products that allegedly infringe the '773 patent: the Nexus 5000 Series switch² ("Nexus 5000") and the UCS 6100 Series Fabric Interconnect ("UCS 6100"). See Pls.' Mem. Law. Opp'n Def. Cisco Sys. Inc.'s Mot. Summ. J. ("Pls.' Opp'n") 2, ECF No. 126. The Nexus 5000 is a message router that transmits messages between processing elements. See Decl. Daniel M. Forman Supp. Cisco Sys. Inc.'s Mot. Strike Portions Expert Report Bradley C. Kuszmaul, Ex. E, Expert Report Bradley C. Kuszmaul ("Pls.' Expert Report") 25, ECF No. 102-5. The UCS 6100 is a more sophisticated message router that at least sometimes is sold as part of a Cisco Unified Computing System. See Pls.' Opp'n, Ex. B., E-mail from Lana Shiferman to Stephen J. Driscoll & Daniel M. Forman, ECF No. 126-2. The Unified Computing System is a package of Cisco products, including processing elements, designed to operate seamlessly and at a high level of performance when connected in a single

² Cisco refers to the Nexus 5000 as a "switch," but it is more appropriate here to call the device a router. Although it is common to call certain types of message routers "switches," the term "switch" in the context of this memorandum refers to the component of a routing device that internally routes messages between the device's input and output circuits.

network. See Servers - Unified Computing, <http://www.cisco.com/en/US/products/ps10265/index.html> (last visited Nov. 13, 2013). The UCS 6100 is "the management and communication backbone" for the Unified Computing System. See Cisco UCS 6100 Series Fabric Interconnects, <http://www.cisco.com/en/US/products/ps10276/index.html> (last visited Nov. 13, 2013). With one exception, T.M. Patents' infringement allegations do not distinguish between the Nexus 5000 and UCS 6100, because both products use identical technology internally to route messages from their input circuits to their output circuits. See "Def.'s Non-Infringement Mem." 10, ECF No. 107.; Pls.' Expert Report 25. Thus, unless the products' distinguishing features are relevant to the issue being decided, the Court will refer to both products as one accused device.

When a message is sent from a processing element to the accused device, the message arrives at the device's input circuit, referred to by Cisco as the Gatos ASIC. Def.'s Non-Infringement Mem. 10. The head of the arriving message contains a destination MAC address designating the message's final intended destination. See id. The Gatos ASIC uses an internal lookup table to translate the MAC address into an egress port number that corresponds to a specific egress port, or output port, of the accused device. Id. The message must exit the

device through the designated output port in order to follow the correct route to its final destination. See id. at 8, 10.

The egress port number is prepended to the message, and the message is sent to the next part of the device, the Altos ASIC. See id. at 11; Pls.' Opp'n 2. Here, Altos's pre-processing element reads the message's egress port number and releases the message to the Altos crossbar fabric. Def.'s Non-Infringement Mem. 11. The crossbar fabric is key to this dispute because it is the switch component of the accused device, comprising a matrix of interconnected pathways linking all of the device's input circuits to all of its output circuits. See Pls.' Expert Report 29-30. When the message travels through the crossbar, it self-routes along an established path to the appropriate egress port and then exits the accused device, traveling on to the next processing element in the network. Id. at 29.

3. Previous Litigation

The '773 patent has been the subject of previous litigation at least twice. In 2006, T.M. Patents brought a suit in the Southern District of New York against Sun Microsystems, Inc. for infringement of several patents, including the '773 patent. T.M. Patents, L.P. v. Sun Microsystems, Inc., 06-cv-13558-WGY, ECF No. 1-7. The case was eventually assigned to this Court, sitting by designation in the Southern District of New York, and the

parties settled before trial in 2011. See T.M. Patents, L.P. v. Sun Microsystems, Inc., 10-cv-12115-WGY, ECF No. 78.

More importantly for the purposes of this memorandum, T.M. Patents was also the plaintiff in an infringement lawsuit brought against International Business Machines Corporation ("IBM") in the Southern District of New York in 1999. See T.M. Patents, L.P. v. International Bus. Mach. Corp. ("IBM Summ. J."), 121 F. Supp. 2d 349 (S.D.N.Y. 2000). In that case, Judge Colleen McMahon had occasion to construe several terms of the '773 patent relevant to this Court's current analysis. See IBM Markman, 72 F. Supp. 2d at 392-98. After claim construction and considerable litigation, Judge McMahon granted summary judgment for IBM on two separate grounds: first, that T.M. Patents did not have standing to sue, and second, that IBM's products did not infringe on the '773 patent. IBM Summ. J., 121 F. Supp. 2d at 352-53.

II. ANALYSIS

A. Summary Judgment Standard

"Summary judgment is as available in patent cases as in other areas of litigation." Continental Can Co. USA, Inc. v. Monsanto Co., 948 F.2d 1264, 1265 (Fed. Cir. 1991) (citing Chore-Time Equipment, Inc. v. Cumberland Corp., 713 F.2d 774, 778-79 (Fed. Cir. 1983)). Summary judgment is proper if the moving party shows, based on the materials in the record, that

"there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). An issue of material fact is genuine "if the evidence is such that a reasonable jury could return a verdict for the nonmoving party." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1985). Whether a fact is material or not depends on the substantive law of the case, and only factual disputes that might affect the outcome of the suit can properly preclude summary judgment. Id.

When deciding a motion for summary judgment, the Court views the record "in the light most favorable to the non-moving party" and draws all reasonable inferences in favor of the respondent. Pineda v. Toomey, 533 F.3d 50, 53 (1st Cir. 2008). Summary judgment must be granted if, after adequate time, the non-moving party "fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986).

B. Literal Infringement

In its motion for summary judgment of non-infringement, Cisco raises several arguments distinguishing its products from the claims of the '773 patent. It is necessary to address only one of these arguments at length in this memorandum: Cisco contends that its products do not infringe because they do not

read on the claim limitation requiring a switch that establishes and maintains a cut-through path from an input circuit to an output circuit "for each message received" by the device. See Def.'s Non-Infringement Mem. 15-19. The Court agrees with this position, for the reasons set out below.

1. Standard of Review

Determination of patent infringement entails a two-step process: first, the relevant patent documents are studied to determine the scope and meaning of the claims asserted, and second, the properly construed claims are compared to the accused products. See Becton Dickinson & Co. v. C.R. Bard, Inc., 922 F.2d 792, 796 (Fed. Cir. 1990) (citing Caterpillar Tractor Co. v. Berco, S.P.A., 714 F.2d 1110, 1114 (Fed. Cir. 1983)). A plaintiff will prevail in a patent infringement suit only if "every limitation set forth in a claim [is] found in an accused product or process exactly or by a substantial equivalent." Id. at 796 (citing Corning Glass Works v. Sumitomo Elec. U.S.A., Inc., 868 F.2d 1251, 1259 (Fed. Cir. 1989)).

The first step of patent construction is matter of law for a judge, not a jury, to decide. Markman v. Westview Instruments, Inc., 517 U.S. 370, 372 (1996). When the parties do not dispute relevant facts but instead dispute the construction of a claim, "the question of literal infringement collapses into one of claim construction and is thus amenable to summary judgment."

MBO Labs., Inc. v. Becton, Dickinson & Co., 783 F. Supp. 2d 216, 220-21 (D. Mass. 2011) (Stearns, J.), aff'd, 467 Fed. App'x 892 (Fed. Cir. 2012) (citing Athletic Alts., Inc. v. Prince Mfg., Inc., 73 F.3d 1573, 1578 (Fed. Cir. 1996)).

2. Previous Claim Construction

During the claim construction process that took place last June, the Court construed a number of claim terms in Claims 1 and 9 at the request of the parties.³ See Markman Order. At this stage of the litigation, however, some constructions remain disputed, giving the Court occasion to revisit two claim terms that are relevant to its infringement analysis.

a. "Once the Router Node Receives Enough of a Message to Decode Its Address"

As stated earlier, wormhole routing represents an improvement over the prior art of store-and-forward routing because it enables devices to speed up message transmissions. See IBM Markman, 72 F. Supp. 2d at 392. Accordingly, the timing of events in a patented wormhole routing method is important to the method's novelty. Last June, the Court was asked to construe claim language relating to when the claimed switch must establish a path for a message to travel to the appropriate

³ The Court heard arguments relating to the construction of Claim 2, but "decline[d] to put any gloss on claim 2 because the plain and ordinary meaning of the words is appropriate." Markman Order 2.

output circuit. The Court determined that “the paths must be established once the router node receives enough of a message to decode its address.” Markman Order ¶ 3.

In subsequent briefing materials and at oral argument, the parties have disputed the scope of the term “once.” See, e.g., Def.’s Non-Infringement Mem. 15-17; Pls.’ Opp’n. 11-12; Tr. Mot. Hr’g 7:16-8:11, ECF No. 140. The Court spoke clearly on this issue, however, during the Markman hearing.⁴ The claimed switch does not need to establish a message’s path immediately after receiving enough information to decode its address, but the switch must establish a path before the full message has been received. Otherwise, the switch is not using cut-through switching to route the message.

b. “For Each Message Received”

The Court was also asked to construe the phrase “for each message received by said input circuits” in the larger context of the following claim language, found in Claims 1.B.iii and 9.C

⁴ Cisco asked the Court to construct a claim limitation requiring the patented switch to establish a path “as soon as” a message’s address is decoded, Markman Tr. 17:14-20:23, and the Court declined to do so, id. at 25:18-25. The Court further proposed adding language to its construction clarifying that the patented switch must begin forwarding “before the whole message has arrived,” id. at 15:6-7, and T.M. Patents confirmed that “what the wormhole switching is about is forwarding the message before the end is received,” id. at 20:25-21:1. Cisco ultimately persuaded the Court to refrain from adding such language, but only on the ground that it was superfluous. See id. at 19:11-21:10.

and reproduced here with relevant phrases emphasized for clarity:

[A] switch connected to said input circuits for, for each message received by said input circuits, decoding one address element of the message to identify therefor an output circuit, said switch establishing a path for said message between the input circuit which received the message and the identified output circuit to facilitate the transfer of message elements of said message therebetween, said switch maintaining the path until the last of the serially-received message elements for the message have been transferred to the output circuit.

U.S. Patent No. 5,212,773 claim 1.B.iii (filed Feb. 22, 1991).

Claim 9.C is identically phrased. U.S. Patent No. 5,212,773 claim 9.C (filed Feb. 22, 1991).

During claim construction, the parties disputed whether the phrase "for each message received" modifies all three gerunds in the claim term: decoding, establishing, and maintaining. See, e.g., Pls.' Opening Markman Br. 6-8; Cisco Sys., Inc.'s Opening Claim Construction Br. ("Def.'s Opening Markman Br."). 8-13, ECF No. 47. This Court ruled that it does, meaning that a switch practicing the '773 patent must not only decode the address elements of each message received, the switch must also establish and maintain a path for the message to travel directly from an input circuit to an output circuit. See Markman Order ¶ 2.

To illustrate the scope the Court intended to give to this construction, consider that when this same language was the subject of litigation before Judge McMahon in the IBM case, accused products in that case did not practice this claim limitation. That is, then-defendant IBM's "post-Springwood" products did not establish or maintain a path to the output circuit for each message, because IBM's switches were designed to sometimes "interleave chunks of different messages with each other" as the messages traveled through the switch. IBM Summ. J., 121 F. Supp. 2d at 375. As a result, message transmissions crossing paths in the post-Springwood chips frequently interrupted each other's routes. Id. at 376. The '773 patent, as this Court construes it, requires the switch to establish and maintain dedicated paths in addition to decoding a message's destination information.

3. The Construction of "Each"

While this construction lends some clarity to the issues at bar, it is now apparent that the parties further dispute the meaning of the term "each" in the phrase "for each message received." Although both parties have made statements suggesting otherwise, see, e.g., Defs.' Non-Infringement Mem. 15-16; Pls.' Opp'n 8-9, none of the Court's constructions during the Markman hearing were primarily addressed to defining that term. The

Court's infringement analysis regarding this claim language cannot proceed until the word "each" is more directly construed.

a. The Parties' Arguments

Cisco would have the Court construe the term "each" to mean "each and every" because it is, according to Cisco, consistent with the term's plain meaning. See Def. Cisco Sys., Inc.'s Reply Supp. Mot. Summ. J. Non-Infringement ("Def.'s Reply) 2-3, ECF No. 128. Adopting this construction would mean that without exception, a device practicing the '773 patent must establish and maintain a message's path to the output circuit before the full message is received by the device. Such a reading favors a ruling of non-infringement because Cisco has identified four scenarios when its devices, by design, do not establish or maintain a path to the output circuit before the full message has been received:

(1) The accused devices are designed to stall the routing process when there is "contention" for an output port. See Def.'s Non-Infringement Mem. 17. Output port contention, also called message contention, occurs when a message is destined to an output circuit that is already engaged by another message transmission, or when multiple messages are destined to one output circuit at the same time. Id. In these cases, the accused products will buffer messages, temporarily holding some back so that only one message travels along a path to a given output

circuit at a time. Id. This delay means that sometimes the device has received the full message before a path is established. Id.

(2) The default settings of the accused devices provide that the device's input circuits do not establish a path for any message until at least 128 bytes of the message have been received. Id. at 16. This threshold can be lowered to as few as eighty bytes by user specification. Id. Thus, messages shorter than eighty bytes, or shorter than the user-prescribed threshold, are received by the device in their entirety before any path is established. Id.

(3) When a message is transmitted to the accused devices via certain high-performance technology, like Fiber Channel over Ethernet or 1-gigabit Ethernet ports, the accused device receives the full message before it has a chance to establish a path. Id. at 17.

(4) When a message arrives at the device's input circuits in a corrupted state, or when a message satisfies the criteria of a user-prescribed content filter, the accused devices drop the message packet without ever establishing a path. Id.

T.M. Patents does not dispute that Cisco's products practice these features. It does, however, take the position that "each" cannot be synonymous with "each and every" because, it contends, the '773 patent is not limited to a device that

establishes a cut-through path in every conceivable circumstance. See Pls.' Opp'n 12-13. Indeed, the preferred embodiment of the '773 patent discloses features that delay establishing a path when there is output port contention and that fail to establish any path when there is message corruption. Id. at 13. The fact that the preferred embodiment contemplates these "unusual situations" proves, id. at 11, on T.M. Patents' view, that the term "each" cannot mean that the claimed device establishes a wormhole path for all messages without exception. Id. at 8-9. By this logic, "each" is effectively construed to mean "some."

b. The Meaning of "Each" in T.M. Patents v. IBM

The parties' arguments in this case are similar, to say the least, to the arguments considered by Judge McMahon more than a decade ago. Some of the accused devices in that case, like Cisco's products, established cut-through paths for messages except when there was output port contention. See IBM Summ. J., 121 F. Supp. 2d at 375, 377 (describing IBM's line of "pre-Springwood" products). IBM argued that "each" ought mean "each and every," thus precluding its products from infringing, and T.M. Patents argued that features disclosed in the '773 patent's preferred embodiment showed that "each" ought still admit of some exceptions for unusual circumstances. Id. at 377-78.

Cisco has argued that under the doctrine of collateral estoppel, T.M. Patents is bound by Judge McMahon's construction of the meaning of "each." See, e.g., Def.'s Opening Markman Br. 9-11. In response, T.M. Patents contends that it is not estopped by that decision because Judge McMahon's decision was based not only on a finding of non-infringement, but also on the alternative and independent ground that T.M. Patents lacked standing to sue, giving the Southern District of New York no subject-matter jurisdiction over the suit. See Pls.' Opening Markman Br. 1 n.1.

Consistent with the statements this Court made from the bench during the June Markman hearing, the Court declines to rule that T.M. Patents is barred by collateral estoppel from litigating these issues. See Markman Tr. 3:8-17. The Court will follow, however, its established norm of deference to all reasonable, previously rendered decisions. In light of the many similarities between this case and IBM, Judge McMahon's rulings are especially persuasive to the Court.

Judge McMahon's analysis of the phrase "for each message" contained two key conclusions. First, she determined that the claim language "for each message" is clear and unambiguous, and nothing additional ought be read into it. IBM Summ. J., 121 F. Supp. 2d at 378. Second, she concluded that "[r]eading 'each' as 'some' would . . . allow [T.M. Patents] to recapture certain

elements that it disclaimed in order to obtain allowance of the '773 patent." Id. Judge McMahon examined the '773 patent's prosecution history and determined that after T.M. Patents' initial patent application was rejected, it added the phrase "for each message" to the claims that eventually became Claims 1 and 9 to "overcome the impact of prior art," id. at 380, namely a system in which the relevant switch established a cut-through path to the output circuit for at least some messages. See id. at 379-80. Given this pre-existing technology, Judge McMahon reasoned that T.M. Patents' invention must be limited to a device in which the switch establishes a path to the output circuit for all messages, even when those messages are ultimately dropped or buffered. See id. at 380.

On these grounds, Judge McMahon found that IBM's products did not establish or maintain a cut-through path "for each message received" and thus did not infringe on the '773 patent. Id. at 379-80.

c. The Meaning of "Each" in This Case

This Court concurs with Judge McMahon's well-reasoned analysis. First, the claim language is unambiguous and additional meaning ought not be read into it. The concept of "some" is not inherent in the plain meaning of "each," and no evidence has been given to suggest that a person having ordinary skill in the art would think otherwise. This observation already

presents grounds sufficient for this Court to rule that a switch component practicing Claims 1 and 9 of the '773 patent must establish and maintain a wormhole path to an output circuit for all of the messages the device receives, even when there is message contention or some other exception.

Second, the prosecution history of the '773 patent forecloses T.M. Patents from claiming ownership over inventions that establish wormhole paths for fewer than all messages received. T.M. Patents disputes Judge McMahon's reading of the patent history and explains that the phrase "for each message" was not added to the claim language to move its patent application to novel territory, but merely to clarify the scope of its invention. See Pls.' Opening Markman Br. 8; Tr. Mot. Hr'g 13:6-14:12. The Court has no reason to disbelieve this explanation, but T.M. Patents' motivation for inserting this phrase does not bear on the plain meaning of "each," nor does it mitigate the undisputed fact that prior art taught a switch that established cut-through paths for at least some messages. The '773 patent is not novel unless it teaches more than that.

The Court is moreover unswayed by the fact that the preferred embodiment of the '773 patent contemplates message contention, for the same reasons that this information did not sway Judge McMahon. See IBM Summ. J., 121 F. Supp. 2d at 378. The preferred embodiment deals with output port contention by

routing messages to a buffering system, described in Claim 2 of the patent. See id. at 380. That the preferred embodiment teaches more than one claim does not give this Court sufficient reason to depart from its construction of the term "each" as it is used in Claims 1 and 9.

Therefore, Cisco's devices read on this part of the claim only if the accused devices employ switch components that establish a wormhole path to an output circuit for each message, even when there is output port contention or other extenuating circumstance. Given this construction, no reasonable fact-finder could find that the accused devices infringe on this claim limitation.

4. Part-Time Infringement

T.M. Patents argues in the alternative that even if "each" does not mean "some," Cisco is still liable for part-time infringement, occurring whenever the accused devices do establish and maintain cut-through paths in the typical routing circumstance. Pls.' Opp'n 10-11. When T.M. Patents made this same argument before Judge McMahon, she declined to follow it, see IBM Summ. J., 121 F. Supp. 2d at 380, and this Court does the same. The doctrine of part-time infringement is not applicable to the claim limitations at issue here.

It is true that "[i]f a claim reads merely on a part of an accused device, that is enough for infringement." SunTiger, Inc.

v. Scientific Research Funding Grp., 189 F.3d 1327, 1336 (Fed. Cir. 1999) (holding that the accused product, a sunglass lens, could infringe even though only a pin-head sized portion of the lens was alleged to practice the patented claims). Adding non-patented features to an accused device does not dilute the infringing character of the parts of the device which do read on the claims. Id. (quoting Stiftung v. Renishaw P.L.C., 945 F.2d 1173, 1178 (Fed. Cir. 1991)). T.M. Patents points out that when Cisco's products buffer, drop, or otherwise delay message routing, they employ "additional circuitry" and protocols to deal with these circumstances. Pls.' Opp'n 11. Thus, T.M. Patents contends, the occurrence of these exceptions ought not permit Cisco to avoid a ruling of infringement. Id.

This reasoning misconstrues the similarities between prior case law and the present case. According to the case law, part-time infringement can occur when part of a device practices every relevant claim limitation. See SunTiger, Inc, 189 F.3d at 1336. In the present case, the accused device practices every relevant claim limitation only part of the time. That Cisco installs additional features to deal with certain exceptions does not change the fact that when those exceptions occur, the switches in Cisco's products do not establish a wormhole path.

The Federal Circuit has established that infringement can occur when "an accused product . . . sometimes, but not always,

embodies a claimed method," Bell Commc'ns Research, Inc. v. Vitalink Commc'ns Corp., 55 F.3d 615, 622-23 (Fed. Cir. 1995), but it has also recognized that this principle does not prevail in contravention of a claim limitation. In IGC-Medical Advances, Inc. v. USA Instruments, Inc., 34 F. App'x 715 (Fed. Cir. 2002), a patent-holder sued its competitor for infringement, arguing in part that an element of the competitor's devices practiced an arched shape protected by the patent in suit. Id. at 719. The accused elements, however, only assumed an arched shape when in active use, and the claim limitation taught a "fixed arched shape." Id. at 719-20. On these facts, the Federal Circuit ruled the plaintiff's part-time infringement argument to be "without merit." Id. at 720.

Similarly, the terms of the '773 patent preclude T.M. Patents from claiming the benefit of the part-time infringement doctrine. As construed by this Court, the relevant claim limitations teach a switch that always establishes a wormhole path. That this task is always performed is essential to the limitation, given the plain meaning of "each" and because it is well-established by this point that the '773 patent does not protect systems which practice wormhole routing only some of the time. A ruling of part-time infringement would permit T.M. Patents to circumvent this key limitation on the scope of its patent. No reasonable fact-finder could find that Cisco's

products infringe on a part-time basis given the claim limitations of the '773 patent.

III. CONCLUSION

On the ground that the accused devices do not read on the claim limitation requiring a switch that establishes and maintains a wormhole path for each message received by the device, the Court therefore GRANTS the Defendant Cisco's motion for summary judgment of non-infringement, ECF No. 106. On all other grounds, summary judgment of non-infringement is DENIED.

Because this ruling disposes of the Plaintiff's case, the Court need not and does not reach the merits of Cisco's motion for summary judgment to limit damages or T.M. Patents' cross-motion for summary judgment on the marking issue.

SO ORDERED.

/s/ William G. Young
WILLIAM G. YOUNG
DISTRICT JUDGE