

**United States Court of Appeals
for the Federal Circuit**

TRAVEL SENTRY, INC.,
Plaintiff-Cross-Appellant

v.

DAVID A. TROPP,
Defendant-Appellant

DAVID A. TROPP,
Plaintiff-Appellant

v.

**CONAIR CORPORATION, BRIGGS & RILEY
TRAVELWARE LLC, EBAGS, INC., EAGLE CREEK,
A DIVISION OF VF OUTDOOR, INC., HP
MARKETING CORP., LTD., L.C. INDUSTRIES, LLC,
MAGELLAN'S INTERNATIONAL TRAVEL
CORPORATION, MASTER LOCK COMPANY LLC,
OUTPAC DESIGNS INC., SAMSONITE
CORPORATION, TRAVELPRO INTERNATIONAL
INC., TRG ACCESSORIES, LLC, TUMI, INC.,
WORDLOCK, INC.,**
Defendants-Cross Appellants

VICTORINOX SWISS ARMY, INC.,
Defendant-Appellee

TITAN LUGGAGE USA, DELSEY LUGGAGE INC.,
Defendants

2016-2386, 2016-2387, 2016-2714, 2017-1025

Appeals from the United States District Court for the Eastern District of New York in Nos. 1:06-cv-06415-ENV-RLM, 1:08-cv-04446-ENV-RLM, Judge Eric N. Vitaliano.

Decided: December 19, 2017

WILLIAM L. PRICKETT, Seyfarth Shaw LLP, Boston, MA, argued for cross-appellants Briggs & Riley Travelware LLC, Conair Corporation, Eagle Creek, A Division of VF Outdoor, Inc., HP Marketing Corp., Ltd., L.C. Industries, LLC, Magellan's International Travel Corporation, Master Lock Company LLC, Outpac Designs Inc., Samsonite Corporation, TRG Accessories, LLC, Travel Sentry, Inc., Travelpro International Inc., Tumi, Inc., Wordlock, Inc., eBags, Inc. and appellee Victorinox Swiss Army, Inc. Cross-appellants Travel Sentry, Inc., Conair Corporation, Eagle Creek, A Division of VF Outdoor, Inc., HP Marketing Corp., Ltd., L.C. Industries, LLC, Master Lock Company LLC, Outpac Designs Inc., Samsonite Corporation, Travelpro International Inc., TRG Accessories, LLC, Wordlock, Inc. and appellee Victorinox Swiss Army, Inc. also represented by BRIAN MICHAELIS.

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Before LOURIE, O'MALLEY, and TARANTO, *Circuit Judges*.
O'MALLEY, *Circuit Judge*.

This is the third time we have had occasion to preside over this longstanding dispute regarding whether Travel Sentry, Inc. ("Travel Sentry") and its licensees infringe one or more claims of two patents issued to appellant David A. Tropp ("Tropp"): U.S. Patent Nos. 7,021,537 ("the '537 patent") and 7,036,728 ("the '728 patent"). See *Travel Sentry, Inc. v. Tropp (Travel Sentry II)*, 497 F. App'x 958 (Fed. Cir. 2012); *Tropp v. Conair Corp.*, 484 F. App'x 568 (Fed. Cir. 2012). In this most recent iteration, Tropp appeals from the district court's entry of summary judgment that Travel Sentry and its licensees do not directly infringe any of the method claims recited in the '537 and '728 patents under 35 U.S.C. § 271(a). See *Travel Sentry, Inc. v. Tropp (Travel Sentry III)*, 192 F. Supp. 3d 332 (E.D.N.Y. 2016). Travel Sentry and several of its licensees cross-appeal from the district court's denial of their motions for attorney fees brought under 35 U.S.C. § 285.

We conclude that there are genuine disputes of material fact regarding whether Travel Sentry directs or controls the performance of certain steps of the claimed

methods. Accordingly, we vacate the district court's entry of summary judgment of noninfringement in favor of Travel Sentry and its licensees and remand for further proceedings. Because Travel Sentry and its licensees are no longer "prevailing parties" to whom an award of attorney fees could be made under 35 U.S.C. § 285, we dismiss their cross-appeal as moot.

I. BACKGROUND

A. Factual Background

The claims of the '537 and '728 patents are directed to methods of improving airline luggage inspection through the use of dual-access locks. Claim 1 of the '537 patent is representative, and recites:

A method of improving airline luggage inspection by a luggage screening entity, comprising:

- [a] making available to consumers a special lock having a combination lock portion and a master key lock portion, the master key lock portion for receiving a master key that can open the master key lock portion of this special lock, the special lock designed to be applied to an individual piece of airline luggage, the special lock also having an identification structure associated therewith that matches an identification structure previously provided to the luggage screening entity, which special lock the luggage screening entity has agreed to process in accordance with a special procedure,
- [b] marketing the special lock to the consumers in a manner that conveys to the consumers that the special lock

will be subjected by the luggage screening entity to the special procedure,

- [c] the identification structure signaling to a luggage screener of the luggage screening entity who is screening luggage that the luggage screening entity has agreed to subject the special lock associated with the identification structure to the special procedure and that the luggage screening entity has a master key that opens the special lock, and
- [d] the luggage screening entity acting pursuant to a prior agreement to look for the identification structure while screening luggage and, upon finding said identification structure on an individual piece of luggage, to use the master key previously provided to the luggage screening entity to, if necessary, open the individual piece of luggage.

'537 patent col. 6, ll. 6–37.

A comprehensive overview of the facts of these cases is provided in *Travel Sentry II*. 497 F. App'x at 959–63. Only background relevant to this appeal is provided here.

Tropp, through his company Safe Skies, LLC, administers a lock system that permits the Transportation Security Administration (“TSA”) to unlock, inspect, and relock checked baggage. *Id.* at 960. Travel Sentry also administers a system that enables a traveler to lock a checked bag while allowing TSA to open the lock, search the bag as needed, and then relock it. *Id.* at 961. The identifying mark on Travel Sentry’s locks is a red dia-

mond logo, for which Travel Sentry holds a registered trademark. *Id.* Travel Sentry has entered into license and distribution agreements with several lock manufacturers, lock distributors, and luggage manufacturers, under which Travel Sentry receives payments in exchange for granting these entities the right to use and market its locks and master keys. *Id.* Travel Sentry, however, “retains the right to monitor the quality of the locks bearing its mark and to control the distribution of master keys, which have a distinctive shape and color.” *Id.*

In October 2003, Travel Sentry entered into a three-page Memorandum of Understanding (“MOU”) with TSA. *Id.* The MOU, which is the only written agreement between TSA and Travel Sentry concerning Travel Sentry certified locks, states that Travel Sentry will supply TSA with master keys (termed “passkeys”) to open checked baggage secured with certified locks. *Id.* According to the MOU, the purpose of the agreement:

is to set forth terms by which Travel Sentry will provide TSA, at no cost, with 1,500 complete sets of passkeys for the TSA to distribute to field locations. These passkeys are designed to permit TSA screeners to open checked baggage secured with Travel Sentry certified locks without breaking such locks.

TSA will test these passkeys to ensure their operational suitability. If TSA determines that Travel Sentry certified locks or the passkeys required for their operation do not perform their intended function, TSA will inform Travel Sentry and this agreement will be considered null and void. TSA takes no responsibility for any damage to locks or baggage secured with Travel Sentry locks, although TSA will make good faith efforts to distribute the passkeys and information provided by

Travel Sentry on the use of the passkeys, and to use the passkeys to open checked baggage secured with Travel Sentry certified locks whenever practicable. TSA screeners will make good faith efforts to relock Travel Sentry locks after bags are inspected.

Id. at 961.

The MOU also sets forth the responsibilities of both parties to the agreement. With respect to TSA, the MOU provides that:

- (a) TSA will accept passkey sets, as well as back-up replacement sets, from Travel Sentry and distribute the sets to all areas where baggage is being screened;
- (b) the passkeys will be stamped “Property of TSA” and “Unlawful to Duplicate,” may include the DHS logo if desired and authorized, and will be marked with a tracking number in a TSA-agreed format so that they can be easily integrated into the TSA property management system;
- (c) Travel Sentry will coordinate the content of public announcement with the TSA in advance of the program launch, tentatively scheduled for November 12, 2003, including promotional materials, press releases and similar media; and
- (d) TSA may offer the same terms and conditions in this agreement to any other entity that seeks to provide similar services.

See id. at 961–62. With regard to Travel Sentry’s responsibilities, the MOU states that:

- (a) Travel Sentry acknowledges that the TSA cannot make or infer any exclusive endorsement of Travel Sentry certified locks, nor can Travel Sentry claim that any such endorsement exists.

Travel Sentry may not use the DHS/TSA logo on any of its locks or distributed print or other media materials unless specifically authorized to do so in writing;

(b) Travel Sentry understands that the TSA intends to develop a functional standard, open to the public, for ‘Independent Dual Custody Operation Locking Systems.’ By moving ahead with its program in advance of the publication and adoption of this standard, Travel Sentry or any other entity takes some degree of risk in that their locking system may not meet the final version of the functional standard; and

(c) Travel Sentry will provide TSA with all necessary screener training materials, in sufficient quantities, on lock recognition, use of passkeys to open locks and ordering of replacement or additional sets of passkeys. Travel Sentry will work with TSA in ensuring distribution of training materials to all checked baggage screening sites.

See id. at 962. Finally, the MOU states that its terms will remain in effect until terminated, and that either party may terminate the MOU upon thirty days’ notice to the other party. *Id.*

B. Procedural Background

The procedural histories of these cases closely tracked the developments in *Akamai Technologies, Inc. v. Lime-light Networks, Inc.*, Civ. Action No. 06–11109–RWZ (D. Mass.), a case that resulted in a number of decisions from this court and one from the Supreme Court examining the respective scopes of divided and induced infringement.

Travel Sentry II primarily concerned Tropp’s appeal of the district court’s 2010 grant of summary judgment that Travel Sentry does not directly or indirectly infringe

claims of either patent. *See generally Travel Sentry II*, 497 F. App'x 958. The district court, relying on this court's precedents in *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373 (Fed. Cir. 2007), *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318 (Fed. Cir. 2008), and *Golden Hour Data Systems, Inc. v. emsCharts, Inc.*, 614 F.3d 1367 (Fed. Cir. 2010), held that Travel Sentry could be held liable as a direct infringer under 35 U.S.C. § 271(a) only if it "controls the TSA's performance" of the last two claim steps. *Travel Sentry, Inc. v. Tropp (Travel Sentry I)*, 736 F. Supp. 2d 623, 636 (E.D.N.Y. 2010).

The district court then considered whether the MOU was sufficient "to establish the 'control or direction' requirement for joint infringement liability established by the Federal Circuit in *BMC Resources* and *Muniauction*." *Id.* at 638. The district court answered this question in the negative, reasoning that, "[q]uite simply, Tropp points to no evidence at all that could morph this relatively noncommittal 'understanding' between Travel Sentry and the TSA into a contract that renders Travel Sentry vicariously liable for the TSA's actions." *Id.* (citation omitted). The district court then observed that the MOU (1) does not subject TSA "to any concrete or enforceable obligation to use the master keys at all," (2) expressly absolves TSA "of liability for any locks that are damaged during the luggage screening process," (3) does not "provide for any consequences of a failure to comply," and (4) can unilaterally be terminated by either party. *Id.* In the district court's view, "all that the MOU proves is that Travel Sentry facilitates the TSA's access to Travel Sentry's lock system (*i.e.*, supplies it with the master keys and provides instructions and guidance to TSA screeners on how to use the system)," which the court found to be analogous to the situation in *Muniauction*, in which we held that a defendant is not liable for direct infringement where it merely "controls access to its system and instructs [third parties]

on its use” *Id.* (citing *Muniauction*, 532 F.3d at 1329).

The district court then disposed of Tropp’s indirect infringement claim, reasoning that, “in the absence of a showing that any entity has directly infringed Tropp’s patents, any claim by him against Travel Sentry for indirect infringement fails as a matter of law.” *Id.* at 639. This is because, under this court’s then-prevailing law, “[l]iability for indirect infringement can arise only in the presence of direct infringement.” *Id.* at 639 (citing *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1272 (Fed. Cir. 2004)).

After the district court decided *Travel Sentry I*, but before we issued our opinion in *Travel Sentry II*, we issued our *en banc* opinion in *Akamai Technologies, Inc. v. Limelight Networks, Inc. (Akamai II)*, 692 F.3d 1301 (Fed. Cir. 2012) (en banc) (per curiam), *rev’d*, 134 S. Ct. 2111 (2014). In *Akamai II*, we “reconsider[ed] and overrule[d]” our earlier decision in *BMC*, in which we “held that in order for a party to be liable for induced infringement, some other single entity must be liable for direct infringement.” 692 F.3d at 1306 (citing *BMC*, 498 F.3d 1373). *Akamai* filed a petition for writ of certiorari, which the Supreme Court granted.

Travel Sentry II was decided shortly after *Akamai II* issued. Although we concluded in *Travel Sentry II* that the district court did not err in its direct infringement analysis, we vacated the district court’s grant of summary judgment and remanded “for a determination whether, under the standard set forth in [*Akamai II*], Travel Sentry is liable for indirect infringement.” *Travel Sentry II*, 497 F. App’x at 966–67.

On remand, the district court entertained a second round of summary judgment motions in both actions, but stayed consideration of these motions pending the out-

come of Limelight’s appeal of *Akamai II* to the Supreme Court. On June 2, 2014, the Supreme Court issued its opinion in *Limelight Networks, Inc. v. Akamai Technologies, Inc. (Limelight)*, reversing the judgment below and remanding for further proceedings. 134 S. Ct. 2111, 2120 (2014). We issued a panel opinion in *Akamai Technologies, Inc. v. Limelight Networks, Inc. (Akamai IV)*, 786 F.3d 899 (Fed. Cir. 2015), and then an *en banc* opinion in *Akamai Technologies, Inc. v. Limelight Networks, Inc. (Akamai V)*, 797 F.3d 1020 (Fed. Cir. 2015) (*en banc*), both of which addressed the scope of direct infringement under § 271(a) in instances where no single actor performs all steps of a method claim. In *Akamai V*, we affirmed the principle that “[d]irect infringement under § 271(a) occurs where all steps of a claimed method are performed by or attributable to a single entity,” and held that an entity is responsible for others’ performance of method steps where that entity directs or controls others’ performance or where the actors form a joint enterprise. 797 F.3d at 1022. We also concluded that, on the facts presented, liability under § 271(a) could be found when an alleged infringer “conditions participation in an activity or receipt of a benefit upon performance of a step or steps of a patented method” and “establishes the manner or timing of that performance.” *Id.* at 1023 (citation omitted).

In the wake of *Akamai V*, the parties in this proceeding submitted supplemental briefs to the district court regarding the impact of that opinion on the parties’ summary judgment positions. The district court subsequently entered a memorandum and order in both actions, again granting the motions for summary judgment on noninfringement filed by Travel Sentry and its licensees and denying Tropp’s cross-motions for summary judgment on infringement. *See Travel Sentry III*, 192 F. Supp. 3d 332. The district court reasoned that summary judgment was appropriately awarded to Travel Sentry and its licensees because “there is simply no evidence that Travel Sentry

had any influence whatsoever on the third and fourth steps of the method carried out by the TSA, let alone ‘masterminded’ the entire patented process.” *Id.* at 336. It also wrote that TSA:

faces no consequences from or by anyone for non-compliance if it chooses at any time not to use the master keys, even if it did, at times, use the master keys. There is, bluntly, nothing to suggest that the TSA “needs” Travel Sentry to carry out the luggage screening mandated by Congress. It could design its own keys, break the locks on the luggage, or screen the luggage in another way. It certainly does not take direction from Travel Sentry on the manner or timing of its luggage screening. In sum, the unusual circumstances of *Akamai* are not mimicked here.

Id. at 336–37 (footnote omitted). Importantly, in explaining the legal standard it employed to reach these conclusions, the district court found that *Akamai V* did not expand the scope of direct infringement under § 271(a), and did “not disturb the *BMC Res./Muniauction* test.” *Id.* at 335. It essentially concluded that *Akamai V* was strictly limited to its own facts, and therefore left all existing law under § 271(a) intact. The district court entered final judgments in both actions the same day, and Tropp timely appealed.

Travel Sentry and its licensees thereafter filed motions for attorney fees and costs pursuant to 35 U.S.C. §§ 285 and 1927. The district court denied both motions, and certain of these entities timely appealed.

We have jurisdiction over these appeals pursuant to 28 U.S.C. § 1295(a)(1). The district court properly exercised federal question jurisdiction over both actions pursuant to 28 U.S.C. §§ 1331 and 1338.

C. Standards of Review

“We review a grant of summary judgment under the law of the regional circuit.” *Phil-Insul Corp. v. Airlite Plastics Co.*, 854 F.3d 1344, 1353 (Fed. Cir. 2017) (citing *Grober v. Mako Prods., Inc.*, 686 F.3d 1335, 1344 (Fed. Cir. 2012)). The Second Circuit reviews the grant of summary judgment de novo. *Major League Baseball Props., Inc. v. Salvino, Inc.*, 542 F.3d 290, 309 (2d Cir. 2008). Summary judgment is proper when, drawing all justifiable inferences in the non-movant’s favor, “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); see *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986).

II. DISCUSSION

The primary issue in this appeal relates to attribution: Is there a genuine dispute of material fact regarding whether TSA’s performance of the final two steps of the claims the ’537 and ’728 patents is attributable to Travel Sentry such that Travel Sentry is responsible for directly infringing these claims? To properly frame this question, we first examine the “governing legal framework for direct infringement” outlined in *Akamai V*, 797 F.3d at 1023, and then consider how this framework was applied both to the facts in *Akamai V* and to those in a more recent decision from this court: *Eli Lilly and Co. v. Teva Parenteral Medicines, Inc.*, 845 F.3d 1357 (Fed. Cir. 2017).

A. *Akamai v. Limelight*

The patent at issue in *Akamai* covered methods for efficiently delivering web content, and its claims required the performance of a number of steps, including, “for a given page normally served from the content provider domain, *tagging* . . . embedded objects of the page so that requests for the . . . objects resolve to the domain instead of the content provider domain.” *Akamai Techs., Inc. v.*

Limelight Networks, Inc., 629 F.3d 1311, 1316 (Fed. Cir. 2010) (emphasis altered). Limelight’s customers performed this “tagging” step using “instructions” provided by Limelight, and a jury, after being instructed that Limelight could directly infringe only if it “directed or controlled” its customers’ performance of this step, found that Limelight infringed the claims. *See Akamai II*, 692 F.3d at 1306. The district court thereafter granted Limelight’s motion for judgment as a matter of law based on this court’s opinions in *BMC* and *Muniauction*. *Id.* at 1306–07.

As referenced above, we held on appeal that a defendant may be liable for induced infringement of a method claim if the defendant either has performed some of the steps of a claimed method and has induced other parties to commit the remaining steps or has induced other parties to collectively perform all of the steps of a claimed method. *Id.* at 1313. In so holding, we expressly reconsidered and overruled our earlier decision in *BMC*, in which we “held that in order for a party to be liable for induced infringement, some other single entity must be liable for direct infringement.” *Id.* at 1306 (citing *BMC*, 498 F.3d at 1373). We reversed the district court’s entry of judgment of noninfringement, holding that, “[w]hile we do not hold that Akamai is entitled to prevail on its theory of direct infringement, the evidence could support a judgment in its favor on a theory of induced infringement.” *Id.* at 1319.

Akamai appealed to the Supreme Court, which reaffirmed the principle that, “where there has been no direct infringement, there can be no inducement of infringement under § 271(b).” *Limelight*, 134 S. Ct. at 2117. The Court, however, expressly declined Akamai’s invitation to review the merits of this court’s direct infringement standard set forth in *BMC* and *Muniauction*, but noted that, “on remand, the Federal Circuit will have the oppor-

tunity to revisit the § 271(a) question if it so chooses.” *Id.* at 2120.

We accepted the Supreme Court’s invitation to revisit the contours of § 271(a). *See Akamai V*, 797 F.3d at 1020; *Akamai IV*, 786 F.3d at 903–05. In *Akamai V*, we began by affirming *BMC*’s “single-actor rule,” writing that, “[d]irect infringement under § 271(a) occurs where all steps of a claimed method are performed by or attributable to a single entity.” *Id.* at 1022 (citing *BMC*, 498 F.3d at 1379–81). We next observed that, “[w]here more than one actor is involved in practicing the steps, a court must determine whether the acts of one are attributable to the other such that a single entity is responsible for the infringement.” *Id.* We then held that an entity will be held “responsible for others’ performance of method steps [under § 271(a)] in two sets of circumstances: (1) where that entity directs or controls others’ performance, and (2) where the actors form a joint enterprise.” *Id.* at 1022. It is the first of these circumstances—where an entity directs or controls another’s performance—that lies at the heart of this appeal.

We observed that we had previously held an actor “liable for infringement under § 271(a) if it acts through an agent (applying traditional agency principles) or contracts with another to perform one or more steps of a claimed method.” *Id.* at 1023 (citing *BMC*, 498 F.3d at 1380–81). We went on to conclude, however, that “liability under § 271(a) can also be found when an alleged infringer conditions participation in an activity or receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner or timing of that performance,” *id.* (citing *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 930 (2005), for the proposition that “an actor ‘infringes vicariously by profiting from direct infringement’ if that actor has the right and ability to stop or limit the infringement”). We recognized that, “[i]n those instances, the third party’s actions

are attributed to the alleged infringer such that the alleged infringer becomes the single actor chargeable with direct infringement.” *Id.* Importantly, we stated that, “[w]hether a single actor directed or controlled the acts of one or more third parties is a question of fact” *Id.* at 1023.

Applying this framework, we concluded that “Akamai presented substantial evidence demonstrating that Limelight conditions its customers’ use of its content delivery network upon its customers’ performance of the tagging and serving steps, and that Limelight establishes the manner or timing of its customers’ performance.” *Id.* at 1024. With respect to the first prong—“conditioning use of the content delivery network”—we pointed out that “the jury heard evidence that Limelight requires all of its customers to sign a standard contract,” which “delineates the steps customers must perform if they use the Limelight service,” including “tagging and serving content.” *Id.*

With respect to the second prong—“establishing the manner or timing of performance”—we examined the actions taken by Limelight with respect to each customer desiring to use Limelight’s services. We began by noting that, “[u]pon completing a deal with Limelight, Limelight sends its customer a welcome letter instructing the customer how to use Limelight’s service.” *Id.* at 1024. This letter “tells the customer that a Technical Account Manager employed by Limelight will lead the implementation of Limelight’s services,” and also “contains a hostname assigned by Limelight that the customer ‘integrate[s] into [its] webpages,’” the process of which “includes the tagging step.” *Id.* at 1025. We then observed that “Limelight provides step-by-step instructions to its customers telling them how to integrate Limelight’s hostname into its webpages if the customer wants to act as the origin for content,” and explained that, “[i]f Limelight’s customers do not follow these precise steps, Limelight’s service will

not be available.” *Id.* Finally, we pointed out that “the jury heard evidence that Limelight’s engineers continuously engage with customers’ activities.” *Id.* “In sum,” we wrote, “Limelight’s customers do not merely take Limelight’s guidance and act independently on their own.” *Id.* “Rather, Limelight establishes the manner and timing of its customers’ performance so that customers can only avail themselves of the service upon their performance of the method steps.” *Id.*

B. *Eli Lilly v. Teva Parenteral Medicines*

We recently applied *Akamai V*’s “two-prong test” in *Eli Lilly*, a Hatch-Waxman suit brought by Eli Lilly against several defendants seeking to launch a generic version of Eli Lilly’s chemotherapy drug. 845 F.3d at 1362. The claims in that case comprise three relevant steps: (1) administering a particular dosage of folic acid prior to the first administration of the chemotherapy drug pemetrexed disodium; (2) administering a particular dosage of vitamin B12 prior to the first administration of pemetrexed disodium; and (3) administering pemetrexed disodium. *Id.* at 1362. Though physicians administered vitamin B12 and pemetrexed, their patients “self-administer[ed] folic acid with guidance from physicians.” *Id.* Eli Lilly’s theory of infringement therefore required establishing that physicians were liable for divided infringement, as the defendants were accused of inducing physicians’ direct infringement of the method claims. *Id.* Following a bench trial, the district court, applying *Akamai V*, concluded that the defendants would induce infringement of the claims if their generic version of pemetrexed was launched. *Id.* at 1363.

We agreed. With respect to *Akamai V*’s first prong, we concluded that the district court’s finding that physicians “condition” pemetrexed treatment on the administration of folic acid was supported by the record evidence. *Eli Lilly*, 845 F.3d at 1366. We first observed

that the defendants' Physician Prescribing Information, which is "directed to the physician," explained that folic acid is a "[r]equirement for [p]remedication" in order "to reduce the severity" of the toxicity of the drug. *Id.* We then noted both that the product labeling repeatedly states that physicians should "[i]nstruct patients" to take folic acid, and that the Patient Information informs patients that physicians may withhold pemetrexed treatment based on the results of blood tests and patients' condition. *Id.* Finally, we recognized that the parties' experts did not genuinely dispute that it is "standard practice" to withhold pemetrexed treatment if a patient fails to follow the required regimen of folic acid pretreatment. *Id.*

Importantly, in reaching our conclusion that *Akamai V*'s "conditioning" prong was satisfied, we rejected three arguments advanced by the defendants. First, we agreed with their submission "that mere guidance or instruction is insufficient to show 'conditioning' under *Akamai V*," but observed that "the evidence regarding the critical nature of folic acid pretreatment and physicians' practices support a finding that physicians cross the line from merely guiding or instructing patients to take folic acid to conditioning pemetrexed treatment on their administration of folic acid." *Id.* Indeed, this evidence showed that, if a patient does not take folic acid as instructed, then a physician, in his or her discretion, need not provide pemetrexed treatment based on the patient's failure to perform the step of folic acid administration. *Id.*

We next dismissed the defendants' contention that physicians must "go further to 'verify compliance' with their instructions or to 'threaten' denial of pemetrexed treatment," explaining that conditioning "does not necessarily require double-checking another's performance or making threats." *Id.*

Finally, we rejected the defendants' argument that an actor can only condition the performance of a step "by imposing a legal obligation to do so, by interposing that step as an unavoidable technological prerequisite to participation, or, as in [*Akamai V*], both." *Id.* at 1366–67. We noted that, although we found "conditioning" in *Akamai V* based on evidence that Limelight required all of its customers to sign a standard contract delineating the steps that customers had to perform to use Limelight's service, "we did not limit 'conditioning' to legal obligations or technical prerequisites." *Id.* at 1367. We also clarified that the standard contract in *Akamai V* "was not significant for imposing potential civil liability but for 'delineat[ing] the steps' that customers would have to perform 'if [they] wish[ed] to use [defendant's] product.'" *Id.* at 1367 n.5 (quoting *Akamai V*, 797 F.3d at 1024). We similarly recognized that "we did not focus on whether a customer's failure to perform certain steps might have made it technologically impossible for other steps to occur." *Id.* (citation omitted).

Based on this understanding of *Akamai V*, we found that the district court's conclusion that physicians establish the manner and timing of patients' folic acid intake was not clearly erroneous, agreeing with *Eli Lilly* that expert testimony and product labeling demonstrated that "physicians prescribe or specify a dose of folic acid, specify that patients must ingest the folic acid daily during a particular span of days, and withhold pemetrexed if patients do not follow orders." *Id.* at 1367.

Akamai V and *Eli Lilly* highlight the importance of correctly identifying the relevant "activity" or "benefit" that is being conditioned upon the performance of one or more claim steps. The cases also emphasize that the context of the claims and conduct in a particular case will inform whether attribution is proper under *Akamai V*'s two-prong test.

C. Application to the Facts of this Case

We find that, under the circumstances presented here, a reasonable jury could conclude that TSA's performance of the final two claim steps is attributable to Travel Sentry such that Travel Sentry is liable for direct infringement under § 271(a). Although the partnership-like relationship between Travel Sentry and TSA differs in several respects from the service provider-customer and physician-patient relationships in *Akamai V* and *Eli Lilly*, a common thread connects all three cases: evidence that a third party hoping to obtain access to certain benefits can only do so if it performs certain steps identified by the defendant, and does so under the terms prescribed by the defendant. The district court, however, did not make this connection. Instead, it concluded that the "unusual circumstances of *Akamai* are not mimicked here." *Travel Sentry III*, 192 F. Supp. 3d at 337.

In reaching this conclusion, the district court erred in a number of ways. The district court interpreted *Akamai V* too narrowly when it concluded that the decision "did not disturb" any aspects of our holdings in *BMC* and *Muniauction*. While we did reaffirm the concept of a single-actor theory of direct infringement, we made clear that the restrictive view of when the acts of a third party can be attributable to another evidenced in those cases is no longer the governing law. In other words, we "broaden[ed] the circumstances in which others' acts may be attributed to an accused infringer to support direct-infringement liability for divided infringement, relaxing the tighter constraints on such attribution reflected in our earlier precedents and in the three previous rulings for Limelight on direct infringement." *Mankes v. Vivid Seats Ltd.*, 822 F.3d 1302, 1305 (Fed. Cir. 2015) (citations omitted).

Based in large measure on this reading of *Akamai V* and its impact on the law of direct infringement under

§ 271(a), the district court committed three specific errors in its analysis of Tropp’s claims against Travel Sentry. First, it misidentified the relevant “activity” at issue, broadly defining it as “the luggage screening mandated by Congress.” *Id.* at 336. Second, the district court misapprehended what types of “benefits” can satisfy *Akamai V*’s first prong. Third, the court mischaracterized what is required for one to “condition” a third party’s participation in an activity or receipt of a benefit on the third party’s performance of one or more claim steps. We address each of these, in turn.

1. *Akamai V*’s First Prong

We begin with the district court’s characterization of the relevant “activity.” The district court did not explain why the relevant activity in this case is “luggage screening” generally, and Travel Sentry has not tendered a compelling defense of this definition on appeal. The district court’s characterization is inconsistent with the MOU, which describes a far more specific set of objectives. TSA, in signing the MOU, agreed to make good faith efforts to “distribute the passkeys and information provided by Travel Sentry on the use of the passkeys,” to “use the passkeys to open checked baggage secured with Travel Sentry certified locks whenever practicable,” and to have its employees “relock Travel Sentry locks after bags are inspected.” J.A. 86. These stated purposes make clear that the “activity” in which TSA sought to participate is screening luggage that TSA knows can be opened with the passkeys provided by Travel Sentry.

The district court’s characterization of the activity is also inconsistent with *Akamai V*. If it were true that the relevant activity could be abstracted in the manner Travel Sentry suggests—*i.e.*, if we were to generalize from an agreement between two entities to engage in only limited aspects of an activity that the relevant activity is the entire set of activities—then we would not have found

Limelight liable for direct infringement. Indeed, although Limelight circumscribed its customers' ability to access its *own* content delivery network, there was no evidence that it restricted these individuals' access to *other* networks or their ability to service their own webpages. The district court in this case erred by defining the relevant activity in an unduly broad manner.

The district court's mischaracterization of the relevant activity likewise tainted its view of which, if any, "benefits" Travel Sentry conditions on TSA's performance of the final two claim steps. The district court, in a footnote, rejected Tropp's argument that *Akamai V*'s first prong was satisfied because TSA would not receive certain benefits—*i.e.*, "reduc[ing] theft, reduc[ing] claims, and satisfy[ing] public and political pressure for safe and secure luggage"—unless it practiced the final two claim steps using the passkeys and training provided by Travel Sentry. *Travel Sentry III*, 192 F. Supp. 3d at 337 n.3. The district court reasoned that TSA "screens luggage because of the screening mandate of Congress, not because of any purported intangible benefits," and explained that the "stated purpose on the TSA's MOU with Travel Sentry itself betrays such a grand set of motivations." *Id.*

This understanding of the benefits that Travel Sentry conditions on TSA's performance of the final two claim steps is impermissibly narrow. As the district court acknowledged, the MOU explains that the passkeys that Travel Sentry agreed to provide, and did in fact provide, to TSA "are designed to permit TSA screeners to open checked baggage secured with Travel Sentry certified locks without breaking such locks." J.A. 86. In other words, a reasonable juror could conclude that the "benefit" to TSA contemplated in the MOU is the ability to open identifiable luggage using a master key, which would obviate the need to break open the lock. Indeed, it is irrelevant that TSA screens luggage pursuant a mandate from Congress—what matters is *how* the agency accom-

plishes its luggage screening objective, and whether a benefit flows to TSA from the particular screening method it has chosen.

Viewing the MOU and other record evidence in the light most favorable to Tropp, we find that reasonable jurors could conclude both that TSA receives a benefit from being able to identify Travel Sentry-marked luggage and, where necessary, open that luggage using passkeys that Travel Sentry provided, and that such a benefit is the type of benefit contemplated in *Akamai V*. The fact that TSA entered into the MOU with Travel Sentry implies that TSA believed it would receive *some* benefit from the arrangement, be it tangible (*e.g.*, a reduction in the number of claims submitted by aggrieved travelers or an improvement in the health of its employees) or intangible (*e.g.*, promotion of the public’s perception of the agency).¹ Indeed, these are some of the benefits recited in the specification of the ’537 patent. *See* ’537 patent col. 1, l. 33–col. 2, l. 24. Travel Sentry does not dispute, moreover, that TSA receives a benefit from following what it describes as the “Travel Sentry standard.” *See* Appellee Br. 4 (describing Travel Sentry’s lock system as “streamlin[ing] the opening of locks during screening” and being “more efficient than the more cumbersome TSA Key Ring program”); *see also id.* at 15–17, 37.

We next consider whether a reasonable jury could conclude that Travel Sentry “conditions” TSA’s participation in the correctly defined activity or receipt of the correctly identified universe of benefits on TSA’s performance of the final two claim steps. We answer this ques-

¹ We reject the district court’s suggestion that “intangible benefits” that are conditioned upon performance of claim steps are insufficient to satisfy the first prong of *Akamai V*. Cf. *Travel Sentry III*, 192 F. Supp. 3d at 336 n.3.

tion in the affirmative. Not only has Travel Sentry supplied TSA with passkeys and training that enable TSA to screen for its luggage, but the relevant “activity” is coextensive with the final two claim steps. Indeed, the third step of Tropp’s independent method claims requires having an identification structure that signals to a luggage screener that the lock may be opened with a master key. ’537 patent col. 6, ll. 23–29. The fourth and final step, meanwhile, requires having the luggage screener, acting pursuant to a prior agreement to look for the identification structure, use the master key, where necessary, to open the lock. *Id.* at col. 6, ll. 30–36. These two steps define the relevant activity in this case.² Similarly, whatever benefits flow to TSA from identifying luggage with Travel Sentry’s dual-access locks and from opening these locks with the passkeys that Travel Sentry provided can only be realized if TSA performs the final two claim steps. Travel Sentry’s arguments to the contrary, to the extent they are not premised on an erroneous definition of the relevant activity, go to *Akamai V*’s second prong, and are therefore considered below.

In sum, we conclude that the district court erred in concluding that *Akamai V*’s first prong could not be satisfied as a matter of law on the undisputed facts of this case. We now turn to the second prong of the new *Akamai V* test.³

² Travel Sentry does not dispute Tropp’s submission that “TSA cannot perform the claimed steps without the directions and instrumentalities provided by Travel Sentry, nor can it perform in a way that differs from the method established by Travel Sentry.” Appellant Br. 20.

³ In *Akamai V*, we not only formulated a previously unrecognized category of cases in which attribution under § 271(a) can be found, but also observed that, “[i]n the

2. *Akamai V*'s Second Prong

We likewise conclude that, drawing all justifiable inferences in Tropp's favor, a reasonable jury could find that Travel Sentry has established the manner or timing of TSA's performance. It is undisputed that Travel Sentry entered into the MOU with TSA, provided TSA with passkeys and instructional materials on how to identify locks licensed with Travel Sentry's trademark, and replaced passkeys. *See* Appellee Br. 5 n.3. The MOU sets forth the steps TSA would need to follow in order to use Travel Sentry's standard and obtain the associated benefits. It is also undisputed that TSA has used Travel Sentry's lock system. *See* J.A. 722–23. There is evidence in the record, moreover, that Travel Sentry established its identifying mark, owns and licenses the trademark to that mark, and controls the design of the locks and passkeys. Based on this evidence, a trier of fact could reasonably find that Travel Sentry has established the manner of TSA's performance of the third and fourth steps of Tropp's independent method claims.

The district court found that there is no attribution here because, in its view, the facts place this case within *Akamai V*'s "hypothetical scenario" under which third parties "merely take [the alleged infringer's] guidance and act independently on their own." *Travel Sentry III*, 192 F. Supp. 3d at 335–36 (quoting *Akamai V*, 797 F.3d at 1025). In reaching this conclusion, the district court reasoned that "there is simply no evidence that Travel Sentry had any influence whatsoever on the third and fourth steps of the method carried out by the TSA, let alone 'master-minded' the entire patented process." *Id.* at 336. As explained above, however, to the extent *BMC* or *Muniauc-*

future, other factual scenarios may arise which warrant attributing others' performance of method steps to a single actor." 797 F.3d at 1023.

tion employed or implied a “mastermind” theory of liability under § 271(a), that theory is no longer the governing standard.

The district court’s analysis also fails to acknowledge “the context of the particular facts presented” in this case. *Akamai V*, 797 F.3d at 1023. In *Akamai V*, Limelight required its customers to clear certain technological hurdles before it granted them access to its content delivery network. We observed that, “[i]f Limelight’s customers do not follow [certain] precise steps, Limelight’s service will not be available.” *Id.* at 1025. We found that Limelight established the manner and timing of its customers’ performance because it provided them with detailed instructions regarding how to complete these steps and dedicated resources toward helping the customers resolve problems encountered along the way. *Id.*

Here, it is true that Travel Sentry does not require TSA to accomplish a series of technological feats in order to participate in the Travel Sentry standard. Nor is there evidence that Travel Sentry supervises TSA’s conduct or has employees or other resources dedicated to resolve issues TSA encounters along the way. But the record suggests that, in order for TSA to receive the benefits that flow from inspecting luggage with Travel Sentry’s dual-access locks, it must use the passkeys that Travel Sentry distributed—and, on request, replaces—to open those locks, pursuant to the MOU. Travel Sentry has also provided TSA with training materials to help TSA screeners identify luggage bearing such locks.

A reasonable jury could conclude that those activities by Travel Sentry do establish the manner of TSA’s performance of the final two claim steps. It is just as true in this case as it was in *Akamai V* that, if TSA “do[es] not follow the[] precise steps” of identifying luggage bearing a Travel Sentry certified lock, and, where necessary, using the passkey provided by Travel Sentry to open said lock,

then “[Travel Sentry’s] service will not be available.” *Id.* The steps TSA must take are fewer and less complicated than those required by Limelight’s customers in *Akamai V*, but this is a function of the different contexts presented in the two cases. In *Akamai V*—and in *Eli Lilly* as well—there was evidence in the record that individuals who desired the benefits of a particular service could be denied access to the service unless they satisfied certain conditions imposed by the service provider. The benefits these individuals were seeking, however, were not coextensive with the claim steps they were required to perform; rather, they could receive a benefit from the service provider *after* completion of these prerequisite steps. Here, by contrast, the benefits TSA allegedly seeks flow directly from its performance of the final two claim steps. This is because the very activity in which TSA seeks to participate is the very activity identified in the claim steps.

Travel Sentry’s remaining arguments to the contrary are unavailing. Travel Sentry first submits that, because TSA “is under no obligation to perform any particular luggage screening activity in order to receive anything from Travel Sentry,” the parties’ relationship “falls into the category of ‘nonbinding guidance and independent action’ that presents the ‘exact hypothetical’ of ‘taking guidance and acting independently’ that we addressed in *Akamai V*. Appellee Br. 12–13 (citing *Akamai V*, 797 F.3d at 1025). Travel Sentry is mistaken. Although it is true that TSA is under no obligation to adhere to the terms of the MOU, it is equally true that TSA cannot unlock luggage bearing Travel Sentry certified locks for screening or realize the benefits of such screening unless it performs the final two claim steps. Stated a different way, TSA only receives something *of value* from Travel Sentry when it performs these claim steps.

In *Eli Lilly*, we rejected the related argument that an actor can only condition the performance of a step “by

imposing a legal obligation to do so, by interposing that step as an unavoidable prerequisite to participation, or, as in [*Akamai V*], both.” 845 F.3d at 1366–67. We observed that, in *Akamai V*, “we did not limit ‘conditioning’ to legal obligations or technological prerequisites,” and recognized that the standard contract in that case “was not significant for imposing civil liability but for ‘delineat[ing] the steps’ that customers would have to perform ‘if [they] wish[ed] to use [defendant’s] product.’” *Id.* at 1367 & n.5 (quoting *Akamai V*, 797 F.3d at 1024). Here, too, it is irrelevant that TSA can choose to accomplish its luggage screening mandate through other means. What is critical is that TSA *must* perform the final two claim steps if it wishes to participate in the activity of screening luggage bearing Travel Sentry certified locks by opening such locks with the passkeys Travel Sentry provided.

Travel Sentry also submits that Tropp is incorrect in asserting “that TSA ‘cannot’ perform the two claimed steps ‘without’ Travel Sentry,” arguing that, “[i]n addition to the scenarios described by the district court (*i.e.*, TSA could design its own keys, break the locks, or screen luggage a different way . . .), TSA could figure out the last two steps of Tropp’s claims from a variety of other sources,” including reading the instructions on the packaging of dual access locks sold by other companies and referencing its own website. Appellee Br. 19–20. These arguments fall short. First, TSA would not be participating in the relevant activity or receiving the relevant alleged benefit if it were to “break the locks” or “screen luggage in a different way.” Second, it is immaterial to the second prong of *Akamai V*’s new test that TSA “could figure out” the final two claim steps from a source other than Travel Sentry. Finally, the record contains no evidence that TSA either has “design[ed] its own keys” or has exclusively used copies of the passkeys distributed by Travel Sentry to open luggage bearing Travel Sentry certified locks, such that it would not be performing the

final claim step. Rather, the record suggests that TSA uses the passkeys distributed by Travel Sentry to open luggage with certified locks when the agency deems it necessary to screen such luggage. '537 patent col. 6, ll. 32–36 (requiring the luggage screening entity, upon finding the identification structure, “to use the master key previously provided to the luggage screening entity to, if necessary, open the individual piece of luggage”).

3. The Importance of Context

“[P]rinciples of attribution are to be considered in the context of the particular facts presented,” *Akamai V*, 797 F.3d at 1023, and we are satisfied that the context of this case can justify attributing TSA’s performance of the final two claim steps to Travel Sentry. Our conclusion finds additional support in *Grokster*, a case on which we relied in formulating *Akamai V*’s two-prong test. Indeed, immediately after setting forth this test, we cited to *Grokster*, a case concerning indirect infringement in the copyright context, for the proposition that “an actor ‘infringes vicariously by profiting from direct infringement’ if that actor has the right and ability to stop or limit the infringement.” *Akamai V*, 797 F.3d at 1023 (citing *Grokster*, 545 U.S. at 930). Here, Travel Sentry “has the right and ability to stop or limit” TSA’s ability to practice the final two claim steps—and thus receive the benefits that follow from practicing those steps—through a number of means, including terminating the MOU, discontinuing its practice of replacing passkeys that are damaged or lost, and changing the design of future locks such that the keys previously provided to TSA no longer work.

Accordingly, we conclude that the district court erred in granting summary judgment of noninfringement in favor of Travel Sentry and its licensees. We, thus, vacate that judgment. Because Travel Sentry and its licensees are no longer “prevailing parties” within the meaning of § 285, we dismiss their cross-appeal as moot. *Cf.* 35

U.S.C. § 285 (“The court in exceptional cases may award reasonable attorney fees to the prevailing party.”).

III. CONCLUSION

For the foregoing reasons, we vacate the district court’s judgment of noninfringement in favor of Travel Sentry and its licensees and remand for further proceedings. We dismiss as moot the cross appeal filed by Travel Sentry and its licensees concerning the district court’s denial of these entities’ motions for attorney fees.

VACATED AND REMANDED

COSTS

Costs to Tropp.