

In the
United States Court of Appeals
For the Seventh Circuit

Nos. 20-2953, 20-3213, & 21-2033

REXA, INC.,

Plaintiff-Appellant,

v.

MARK V. CHESTER and MEA INC.,

Defendants-Appellees.

Appeals from the United States District Court for the
Northern District of Illinois, Eastern Division.
No. 1:17-cv-08716 — **Charles P. Kocoras**, *Judge*.

ARGUED FEBRUARY 15, 2022 — DECIDED JULY 28, 2022

Before WOOD, HAMILTON, and BRENNAN, *Circuit Judges*.

BRENNAN, *Circuit Judge*. Mark Chester, then an engineer for a company called Koso America, Inc., participated in a 2002 project aimed at creating a new valve for an actuator—a machine component that produces motion. If successful, the project would have eliminated the need for Koso to pay royalties to another firm. But the project failed to accomplish that goal. Instead, it yielded an experimental prototype of another

actuator, which Koso shelved due to the improbability of commercial success. Chester left Koso the next year.

More than a decade after he worked on the 2002 project, Chester and his employer, MEA Inc., built a commercially successful actuator and filed a related patent application. Ultimately, the patent office allowed portions of their claims. But REXA, Inc., a company affiliated with Koso, sued Chester and MEA for misappropriation of trade secrets and breach of an implied contractual obligation to assign patent rights. REXA alleged that Chester and MEA's actuator incorporated and disclosed confidential designs contained within the prototype that Koso had developed and then abandoned. Following discovery, all parties moved for summary judgment. The district court granted summary judgment to the defendants, Chester and MEA, on all claims. REXA appealed.

We first consider whether the district court properly granted summary judgment to the defendants. Then, we analyze whether the court abused its discretion in awarding Chester and MEA approximately \$2.357 million in attorneys' fees, which they requested as a sanction for REXA's litigation conduct.

I

A

An actuator is a part of a machine that converts energy, like electricity or water pressure, into linear or rotary movement. Examples include an electric motor or an automatic door closer. Hydraulic actuators, often used in the oil and gas industry, regulate the flow of working fluids such as oil.

In 1993, Koso America purchased the assets of Rexa Corporation, which made hydraulic actuators. Since the early

1990s, the Rexa/Koso entities have manufactured the Xpac actuator, a leading self-contained electro-hydraulic actuator. In 2014, Koso underwent a corporate reorganization, which created REXA, Inc. The purpose of the reorganization was to “transfer the Actuator Business to a separate corporation operated under a different name.” As relevant here, Koso transferred “all of the assets comprising the Actuator Business” to REXA, including “[a]ll contracts ... and intellectual property reasonable or necessary to the conduct of the Actuator Business.”

Chester’s employment with Koso. Koso hired Chester as a Massachusetts-based project engineer in 1998, and he was later promoted to a management role. He primarily worked on existing Xpac actuators. Chester’s business card and W-2 forms stated that he worked for Koso, though he never entered into a formal employment agreement.

In 2000, certain Koso employees, including Chester, received a Bonus Letter stating that they would be entitled to a bonus if the company was sold and their employment ended as a result of the sale. That letter was gratuitous; employees who received it were not required to give any consideration for this benefit, and Koso’s board of directors had sole discretion to determine whether and when to pay bonuses. Some employees received a Severance Plan containing a document, titled “Confidentiality, Nonsolicitation, Non-Competition and Assignment Agreement.” But REXA has not shown that Chester received the Confidentiality Agreement.

The 2002 project (RFD 02-122). Beginning in July 2002, Chester participated in a project—detailed in Request for Design (“RFD”) 02-122—that investigated potential alternate valves for the Xpac actuator. The RFD stated: “The existing

flow matching valve still has three years remaining on the patents and thus the royalty. A new design would eliminate the payment and provide a new patent valve that is owned by [Koso].” Chester’s supervisor approved the project, which anticipated a design and manufacturing cost of \$100 per unit.

Ken Enos, Koso’s Director of Engineering, reported to Chester on project-related matters. For several weeks, Chester and Enos sought to create a replacement flow matching valve, as contemplated by the RFD, but they did not succeed. In time though, Chester and Enos created a prototype of an actuator. The prototype modified the existing Xpac actuator by replacing the flow matching valve with two solenoid, or electrically operated, valves. The fully assembled prototype also required modifications to the Xpac actuator’s manifold, tubing, circuit board, and coding.

At Enos’s request, a Koso engineer modified existing computer code to add instructions for opening and closing the solenoid valves. Koso employees neither presented nor discussed that code with Chester, and he never saw it. Additionally, Enos created only one (unofficial) sketch of the prototype, and it did not have a “confidential” label before this litigation commenced. REXA has not identified evidence that Chester ever saw it.

By mid-August 2002, Koso formally terminated the RFD 02-122 project, and the actuator prototype was disassembled. No information concerning the project was used in any later REXA commercial product or strategic plan. Chester was never instructed that Koso viewed the shelved RFD 02-122 project as a trade secret. And REXA has not presented evidence that any Koso employees were told that they had any confidentiality obligations for that project.

The Hawk actuator and the patent application. Chester resigned from Koso in July 2003. Over the next several years, he worked on designing actuators for several of Koso's competitors. In 2012, Chester joined Illinois-based MEA Inc. as a senior engineer. At that time, MEA was manufacturing and selling self-contained electro-hydraulic actuators that used solenoid valves to hold the position of the actuator in place under load.

Chester began working on a new actuator prototype, later known as the Hawk. Like many of MEA's products, the Hawk uses solenoid valves to hold the actuator in position under load. Over several months in 2013, Chester and other MEA employees developed a working prototype of the Hawk actuator, including by writing the software that would run it. Chester and MEA then filed a patent application, which was based on the specific components and performance of the Hawk, with the United States Patent and Trademark Office ("PTO") in October 2014.

In January 2017, the PTO largely rejected the claims asserted in the patent application. According to the PTO, the use of solenoid valves to hold an actuator piston in a specific position was already disclosed in prior art. MEA then amended its application to require a motor that can "accelerate from zero to maximum revolutions per minute (RPM) under full load."

In March 2018 (while this litigation was pending) the PTO issued a notice of allowance in connection with the amended patent application. That notice explained that the invention's improvement "comprises a hydraulic actuator system with a motor driven pump, wherein the motor can accelerate from zero to a maximum revolutions per minute under load for the

purpose of preventing no momentary backwards movement of the actuator.”

B

REXA sued Chester and MEA in the United States District Court for the Northern District of Illinois, alleging misappropriation of trade secrets against both defendants (Count I) and breach of an implied-in-fact contract against Chester (Count IV).¹ During contentious discovery, the defendants accused REXA of improper conduct by (1) combining the 2000 Bonus Letter with a Confidentiality Agreement labeled as Appendix B to that letter and questioning Chester about those documents at his deposition; and (2) using “REXA” in pleadings and discovery responses as a purported shorthand for “Koso.”

First, Chester and MEA alleged that REXA manipulated the Bonus Letter (which Chester received) by producing it attached to the Severance Plan and Appendix B Confidentiality Agreement (which he did not receive). Appendix A to the Severance Plan, which listed Koso employees who were offered the Plan, was not included. Chester was not among those employees listed on Appendix A. After examining the evidence, the district court agreed with Chester and MEA that by “separating Appendix A from the Severance Plan and producing it elsewhere among the discovery documents, REXA attempted to conceal from Chester clear evidence that he had

¹ REXA also brought claims of conversion (Count II) and unfair competition (Count III) against Chester and MEA. The district court ruled that those two claims depended on the trade secret allegations and were preempted. REXA does not challenge that ruling on appeal.

never received either the Severance Plan or the Assignment Agreement.”

Second, Chester and MEA contended that REXA’s use of “REXA” to refer to “Koso” — in pleadings and throughout discovery — was intentionally misleading because it gave the impression that Chester had an employment relationship with REXA. But Chester maintained he was never employed by REXA. The district court agreed. The court found that REXA had “regularly, and falsely, described itself as Chester’s employer during his employment at Koso.”

Following discovery, the parties filed cross motions for summary judgment. The district court ruled for the defendants, dismissing each of REXA’s claims with prejudice. REXA appealed those rulings, but matters concerning fees and costs remained with the district court.

Chester and MEA sought \$2,187,071.12 in attorneys’ fees as a sanction against REXA for litigation misconduct. REXA opposed the fee petition, arguing that it had not committed misconduct and objecting to a wide array of billing entries in the invoices submitted by Chester and MEA as excessive and unnecessary. The district court granted Chester and MEA’s request for attorneys’ fees, invoking its inherent authority to sanction misconduct. REXA’s objections to certain time entries were overruled. After the parties stipulated that \$170,000 should be added to the previously requested award of attorneys’ fees to account for the subsidiary fee litigation, the district court entered an amended judgment awarding Chester and MEA \$2,357,071.12 in fees. REXA renewed its earlier notices of appeal.

II

We first consider the district court's grant of summary judgment to the defendants on REXA's claim for misappropriation of trade secrets in Count I. Our review is *de novo*. *Med. Protective Co. of Fort Wayne, Ind. v. Am. Int'l Specialty Lines Ins. Co.*, 911 F.3d 438, 445 (7th Cir. 2018). Because summary judgment was granted to Chester and MEA, we construe the facts in the light most favorable to REXA and draw all reasonable inferences in its favor. *See id.*; *Gill v. Scholz*, 962 F.3d 360, 363 (7th Cir. 2020) (citation omitted). "An inference is not reasonable if it is directly contradicted by direct evidence provided at the summary judgment stage, nor is a 'conceivable' inference necessarily reasonable at summary judgment." *MAO-MSO Recovery II, LLC v. State Farm Mut. Auto. Ins. Co.*, 994 F.3d 869, 876 (7th Cir. 2021) (citation omitted). Summary judgment is appropriate "if the movant shows 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). We may affirm a district court's grant of summary judgment on any basis that is apparent from our review of the record, provided that the issue was raised and the losing parties had a fair opportunity to contest it in the district court. *Dibble v. Quinn*, 793 F.3d 803, 807 (7th Cir. 2015).

REXA brought its claim for misappropriation of trade secrets under the Illinois Trade Secrets Act ("ITSA"), 765 ILL. COMP. STAT. 1065/1, *et seq.* To prevail on such a claim, the plaintiff must demonstrate "that the information at issue was a trade secret, that it was misappropriated and that it was used in the defendant's business." *Learning Curve Toys, Inc. v. PlayWood Toys, Inc.*, 342 F.3d 714, 721 (7th Cir. 2003) (citations omitted). The statute defines a trade secret as:

information, including but not limited to, technical or non-technical data, a formula, pattern, compilation, program, device, method, technique, drawing, [or] process ... that: (1) is sufficiently secret to derive economic value, actual or potential, from not being generally known to other persons who can obtain economic value from its disclosure or use; and (2) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy or confidentiality.

765 ILL. COMP. STAT. 1065/2(d). There is also a specificity requirement inherent in a claim for misappropriation of trade secrets; a plaintiff must show “concrete secrets” rather than “broad areas of technology.” *Life Spine, Inc. v. Aegis Spine, Inc.*, 8 F.4th 531, 540 (7th Cir. 2021) (quoting *Composite Marine Propellers, Inc. v. Van Der Woude*, 962 F.2d 1263, 1266 (7th Cir. 1992)).

As relevant here, misappropriation under the ITSA involves the “disclosure or use of a trade secret of a person without express or implied consent” by another person who, at the time, knew or had reason to know that knowledge of the trade secret was either “acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use” or “derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use.” 765 ILL. COMP. STAT. 1065/2(b). A misappropriation may also occur when a person produces “modified or even new products that are substantially derived from the trade secret of another.” *Mangren Rsch. & Dev. Corp. v. Nat'l Chem. Co.*, 87 F.3d 937, 944 (7th Cir. 1996) (citations omitted). When there is no genuine

dispute about one or more elements of a claim for misappropriation, summary judgment is appropriate.

A

A focal point of the parties' dispute is whether REXA ever identified a trade secret with sufficient specificity to support a claim under the ITSA. REXA asserts the "2002 Designs," including the actuator prototype, qualify as trade secrets and were maintained as such. Chester and MEA respond that the term "2002 Designs" is vague and fails to sufficiently describe a concrete concept, as required for trade secret protection. Several aspects of the 2002 actuator prototype, Chester and MEA urge, were well known in the actuator industry, precluding trade secret protection for that prototype. REXA counters that the trade secret "was not the solenoid valves but their use in conjunction with other components to create a new and previously unknown actuator."

Case law requires a high level of specificity when a plaintiff makes a claim for misappropriation of a trade secret. *Life Spine*, 8 F.4th at 540; *Composite Marine*, 962 F.2d at 1266. When a plaintiff presents complex or detailed descriptions of methods and processes but fails to isolate the aspects that are unknown to the trade, no trade secret has been identified. *IDX Sys. Corp. v. Epic Sys. Corp.*, 285 F.3d 581, 583–84 (7th Cir. 2002).² Our court has emphasized that "a plaintiff must do more than just identify a kind of technology and then invite

² Although *IDX* involved a claim for misappropriation of a trade secret under Wisconsin law, the statute at issue was materially identical to the ITSA, and federal courts have properly cited *IDX* in applying Illinois trade secret law. See, e.g., *NEXT Payment Sols., Inc. v. CLEAResult Consulting, Inc.*, 2020 WL 2836778, at *10–11 & n.5, 15 (N.D. Ill. May 31, 2020).

the court to hunt through the details in search of items meeting the statutory definition.” *Id.* at 584 (citing *Composite Marine*, 962 F.2d at 1266). The key task for a plaintiff is to present a specific element, or combination of elements, that is unknown to the trade and was allegedly misappropriated.

Applying that framework, we agree with Chester and MEA that REXA has failed to identify a concrete trade secret, as it must, to defeat summary judgment. *IDX* considered and rejected an argument similar to the one REXA advances. There, the plaintiff alleged that certain aspects of billing software which the defendants had misappropriated qualified as trade secrets. In support, the plaintiff, *IDX*, submitted “a 43-page description of the methods and processes underlying and the inter-relationships among various features making up *IDX*’s software package.” *Id.* at 583. Our court noted that *IDX*’s “tender of the complete documentation for the software leaves mysterious exactly which pieces of information are the trade secrets.” *Id.* at 584. Without information sufficient to separate “the trade secrets from the other information that goes into any software package,” the court could not determine “[w]hich aspects are known to the trade, and which are not.” *Id.* Thus, in *IDX* this court affirmed the district court’s grant of summary judgment to the defendants on the claims for misappropriation of trade secrets. *Id.* at 584, 587.

Similarly, REXA broadly contends that the “2002 Designs” were trade secrets that Chester and MEA misappropriated. REXA tells us that Koso kept a sketch of the 2002 actuator prototype (contained within the design file), the source code, and testing results—though not the prototype itself. Without greater specificity, REXA has not identified the trade secrets. *IDX*, 285 F.3d at 584. For this reason, the defendants are

entitled to summary judgment. *Id.* at 584, 587; *see also TLS Mgmt. & Mktg. Servs., LLC v. Rodríguez-Toledo*, 966 F.3d 46, 54 (1st Cir. 2020) (citing *IDX*, 285 F.3d at 584).

REXA's claim also fails for lack of an identifiable trade secret because the company concedes that several aspects of the shelved 2002 actuator prototype were and are widely known in the hydraulic-actuator industry. Under the ITSA, information is not sufficiently secret to qualify for protection when it is "within the realm of general skills and knowledge" in the relevant industry. *Comput. Care v. Serv. Sys. Enters., Inc.*, 982 F.2d 1063, 1072 (7th Cir. 1992) (citation omitted). As REXA acknowledges, the Xpac actuator is publicly available and therefore not a trade secret, as anyone is permitted to copy it. And REXA further admits that the use of solenoid valves to hold an actuator in place was known in the industry before 2002. So, neither the Xpac actuator nor the use of solenoid valves to hold an actuator in place under load qualifies as a trade secret.

No other aspect of the 2002 actuator prototype has been identified with sufficient specificity to defeat summary judgment. It is not our responsibility to "hunt through the details [of the 2002 actuator prototype] in search of items meeting the statutory definition" of a trade secret. *TLS Mgmt. & Mktg. Servs.*, 966 F.3d at 54; *IDX*, 285 F.3d at 584. Even if it were, REXA's trade secret claim would still fall short.

REXA does not dispute that the actuator prototype was an Xpac actuator with two solenoid valves and modifications to the manifold, tubing, circuit board, and coding. At the same time, REXA fails to identify evidence showing that the manifold, tubing, or circuit board were part of any purported trade secret. That leaves only the source code (in combination with

the publicly available Xpac and the widely known use of solenoid valves to hold an actuator in place under load). As the defendants note, REXA does not argue the source code was the key ingredient supporting the existence of a trade secret within the prototype.

So, we conclude that no reasonable jury could find that REXA has identified a trade secret under the ITSA. Nevertheless, we consider whether—if a trade secret had been identified with sufficient specificity—there would be a genuine issue of material fact as to its alleged misappropriation.

B

REXA alleges that its trade secrets were misappropriated twice: when Chester and MEA filed the patent application, and when Chester incorporated the “2002 Designs” into the Hawk actuator. The defendants counter that Chester could not have misappropriated anything qualifying as a trade secret because he never saw Enos’s sketch of the prototype, the source code, or the test results. In reply, REXA argues that Chester’s lack of access to these key documents is irrelevant because he retained knowledge of the 2002 prototype in his mind and later misappropriated that knowledge. Recall that to prove misappropriation, REXA must show the “disclosure or use of a trade secret” by Chester and MEA and that they knew the trade secret had been either “acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use” or “derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use.” 765 ILL. COMP. STAT. 1065/2(b).

Filing the patent application. We first consider if a genuine fact dispute exists about whether, when Chester and MEA

filed the patent application, they misappropriated a trade secret. REXA primarily argues that Chester admitted at his deposition that the 2002 actuator prototype met nearly all the limitations of allowed claim 3 of the patent application.³ REXA further asserts that Chester testified he expected the 2002 prototype to meet the final limitation—having a motor that could accelerate to maximum RPM under load—as well. In other words, REXA contends, Chester believed the 2002 prototype had every feature described in the portion of the amended patent application that the PTO ultimately allowed. To REXA, it follows that “not only was there evidence *sufficient* for a factfinder to conclude that [the patent application] both disclosed and attempted to patent the 2002 Designs, but in fact there could not plausibly be any *other* conclusion.”

Despite these assertions, Chester’s testimony—together with reasonable inferences—does not support the conclusion that the patent application disclosed the “2002 Designs.” REXA’s key premise is incorrect, as it mischaracterizes Chester’s testimony. At his deposition, Chester was asked, “Could the motor of the prototype accelerate to maximum RPM under load?” He responded, “Unknown, as it was not tested.” Although Chester also testified he would have expected the prototype to meet that limitation, he was speculating. So, based on Chester’s statement alone, we do not presume that the prototype would have met the final limitation. *See, e.g.,*

³ Under the Patent Act, an application for a patent must include “one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.” 35 U.S.C. § 112(b); *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901–02 (2014). A limitation delineates and narrows the scope of a claim. *See ABS Glob., Inc. v. Inguran, LLC*, 914 F.3d 1054, 1075–76 (7th Cir. 2019).

Consolino v. Towne, 872 F.3d 825, 830 (7th Cir. 2017) (“[S]peculation is not enough to create a genuine issue of fact for the purposes of summary judgment.”). Had Chester’s testimony been based on his personal knowledge, a disputed question of fact would exist about whether the motor of the 2002 prototype could have accelerated to maximum RPM under load.

Yet, even if the 2002 prototype had met every limitation of the patent application’s allowed claim 3, REXA’s allegations of misappropriation would still rest on a series of untenable inferences. Critically, it is undisputed that eleven years passed between when Chester first worked on the actuator prototype for Koso, and when he started work at MEA on the designs that would later underlie the patent application. As we noted earlier, there is also no dispute that Chester did not see Enos’s sketch of the 2002 prototype, the source code, or the test results. Chester never saw or physically took any documentation with him. But REXA asks the court to infer that he somehow retained and preserved for eleven years the knowledge from his work on the shelved 2002 actuator prototype.

Although Chester would have recognized that this knowledge was commercially valuable, according to REXA he chose to do nothing with it for the entire period before 2013. During this time Chester worked for multiple companies that competed with REXA in the actuator industry. Then, in 2013, Chester supposedly decided to misappropriate his encyclopedic knowledge of the 2002 actuator prototype.

Simply put, these inferences are barely “conceivable” and certainly not “reasonable,” so they will not be drawn at summary judgment. *MAO-MSO Recovery II, LLC*, 994 F.3d at 876; *see also Riley v. City of Kokomo*, 909 F.3d 182, 192 (7th Cir. 2018)

(declining to draw an unreasonable inference at summary judgment). REXA has not directed us to a case where a court inferred that the misappropriation of trade secrets could plausibly have occurred despite a lack of evidence concerning the defendant's seizure or possession of documents. We also have not located such a case. Even more, the eleven-year gap renders the inferences that REXA asks us to draw exceptionally unreasonable.⁴

The Design of the Hawk Actuator. Next, we consider whether Chester misappropriated a trade secret (assuming its existence) when he contributed to the Hawk's design. The parties agree that there are significant differences between the 2002 prototype, which REXA admits had no prospect of commercial success, and the valuable Hawk actuator that Chester and MEA developed and sold.

As discussed above, a central innovation of the Hawk is the inclusion of a motor that can accelerate from zero to maximum RPM under load. Indeed, that feature was essential to the PTO's decision to allow claim 3 of the amended patent

⁴ REXA's Massachusetts authorities, which relate primarily to defendants' violations of implied contractual obligations, involve no comparable gap between a defendant's employment with the plaintiff and the alleged misappropriation. In *Jet Spray Cooler, Inc. v. Crampton*, the defendants immediately began to use information they obtained while employed by the plaintiffs, and they made significant sales to the plaintiffs' largest customers within two years. 282 N.E.2d 921, 923–24 (Mass. 1972). Similarly, in *Whipps, Inc. v. Ross Valve Mfg. Co.*, the individual defendant used his former employer's confidential information within six months of leaving that employer. 2014 WL 1874754, at *2–3 (D. Mass. May 8, 2014). Neither of these out-of-state cases addresses the sizable time gap here, nor does either decision hold that a defendant misappropriates trade secrets simply by retaining information in his mind.

application. Yet it is unknown whether the 2002 prototype could accelerate from zero to maximum RPM under load. Moreover, the patent application's allowable claims require that the "motor coupled to the pump starts milliseconds prior to opening the solenoid valve and said motor coupled to the pump stops milliseconds after closing the solenoid valve." By contrast, REXA admits that in the 2002 prototype the motor stopped before the solenoid valves closed. The 2002 prototype was not tested for, or simply did not have, the features of the patent application that made the Hawk both a non-obvious improvement over prior art and commercially valuable. Chester and MEA therefore could not have misappropriated trade secrets contained within the 2002 prototype.

The Hawk actuator also does not use the manifold, tubing, or computer source code that were part of the 2002 prototype. Notably, the source code that Koso engineers wrote for the 2002 prototype was crucial to its operation but absent from the Hawk. In the district court, REXA agreed with the proposition that the code was "integral to the [prototype]—without the code the [prototype] would not function." Again, though, no such code was present in the Hawk. REXA asks us to infer that Chester retained knowledge of the 2002 source code—which he never saw—for eleven years and then deployed that exact code when building the Hawk. That inference is manifestly unreasonable, so we decline to draw it for purposes of summary judgment.

Without evidence that either Chester or MEA used the source code, REXA must identify "the essential secret ingredient" that was misappropriated. *Mangren*, 87 F.3d at 944. But it has not done so. Given the significant differences between the 2002 actuator prototype and the Hawk actuator—as well

as the passage of many years between the development of each device—we agree with the district court. As a matter of law, Chester and MEA developed the Hawk and filed the patent application without disclosing or using any trade secret belonging to Koso.

Chester’s deposition testimony also supports our conclusion. Asked when he first conceived of the invention described in the patent application, he responded that the Hawk was “based on a lifetime of work in hydraulics” and was an “incremental process” dating back to 1976. REXA does not point to anything that contradicts Chester’s assertions about the way in which the idea for the Hawk came together. It occurred gradually and through the application of accumulated knowledge—not in one fell swoop that transplanted a shelved prototype on which Chester had briefly worked eleven years earlier. There is thus no genuine dispute of material fact as to misappropriation of a trade secret under the ITSA. Summary judgment was properly granted to Chester and MEA on that claim.

III

REXA also challenges the district court’s grant of summary judgment to Chester on Count IV, REXA’s claim for breach of an implied-in-fact contractual obligation to assign any patent rights in connection with the patent application. In evaluating such a claim, federal courts “apply state-law principles of contract formation to determine whether an implied contract existed.” *Farmers Edge Inc. v. Farmobile, LLC*, 970 F.3d 1027, 1031 (8th Cir. 2020) (citing *Teets v. Chromalloy Gas Turbine Corp.*, 83 F.3d 403, 407 (Fed. Cir. 1996)). The parties agree that REXA’s claim for breach of an implied-in-fact contract arises

under the common law of Massachusetts, where Koso employed Chester.

Massachusetts law provides that if an employer “contemplates the discovery of an invention” and contracts with an employee to build it such that the employee “must have reasonably understood that such inventions as resulted from his performance of the contract should belong to the employer,” the employee has “an implied obligation to assign any patents ... for said inventions to his employer.” *Nat'l Dev. Co. v. Gray*, 55 N.E.2d 783, 787 (Mass. 1944) (citations omitted). Subsequent cases have extended that proposition. When an employee—even if hired in a general capacity—is specifically “directed during the course of his employment to develop or perfect new or existing machinery or processes, his employer becomes the owner of resulting inventions and may compel the assignment of patents taken in the employee’s name.” *Steranko v. Inforex, Inc.*, 362 N.E.2d 222, 233–34 (Mass. App. Ct. 1977); see also *Silica Tech, L.L.C. v. J-Fiber, GmbH*, 2009 WL 2579432, at *13 (D. Mass. Aug. 19, 2009) (same).

A

First, we consider whether REXA may recover against Chester for breach of an implied-in-fact contract, notwithstanding that REXA never employed him. The district court said “no.” The court understood Massachusetts common law to dictate that an employee’s implied-in-fact contractual obligation to assign patent rights may not be transferred to a successor corporation. So, according to the court, “any obligations owed by Chester to Koso were not and could not be transferred to REXA.” REXA challenges that conclusion.

We cannot endorse the district court's analysis about the transferability of any implied-in-fact contractual obligation under Massachusetts law. It appears the district court relied exclusively on a case from the Massachusetts Superior Court, *Securitas Sec. Servs. USA, Inc. v. Jenkins*, 2003 WL 21781385 (Mass. Super. Ct. July 18, 2003). There, a successor corporation acquired the defendant's former employer and attempted to enforce a non-competition provision of the employment agreement between the defendant and his former employer. *See id.* at *1–3. The state trial court concluded that because the defendant did not consent to the assignment of his employment agreement to the successor corporation, that assignment was not valid or enforceable. *See id.* at *5–6.

The district court's reliance on *Securitas* was misplaced. REXA is correct that the question of whether an employer's rights under a written employment agreement may be assigned without the employee's consent is materially distinct from whether an implied-in-fact contractual obligation regarding intellectual-property rights may be so assigned. The concerns that weigh against permitting a successor corporation to enforce a contract for employment, a personal service, do not necessarily apply to an implied contractual right to assign intellectual property. Chester and MEA do not sufficiently account for the differences between employment and intellectual-property rights. Notably, in other cases involving similar allegations, courts and parties have assumed that successors-in-interest may enforce the type of implied-in-fact contractual right at issue here.⁵

⁵ *See Farmers Edge*, 970 F.3d at 1029–30 (analyzing, on the merits, a breach-of-contract claim predicated on an implied intellectual-property provision, although the plaintiff corporation was a successor-in-interest

Yet, we decline to hold that as a matter of Massachusetts law, an implied-in-fact obligation to assign patent rights may be transferred to a successor-in-interest. After all, state courts are the “ultimate expositors” of their own laws. *Smart Oil, LLC v. DW Mazel, LLC*, 970 F.3d 856, 863 (7th Cir. 2020) (citation omitted). “[A] federal court sitting in diversity must proceed with caution in making pronouncements about state law,” especially given that such pronouncements “inherently involve a significant intrusion on the prerogative of the state courts to control that development.” *Lexington Ins. Co. v. Rugg & Knopp, Inc.*, 165 F.3d 1087, 1092 (7th Cir. 1999) (citations omitted). Here, there is no need to resolve the Massachusetts state-law issue concerning the transferability of implied-in-fact obligations to assign patents. Instead, we adjudicate REXA’s implied-in-fact contractual claim by applying a requirement common to all such claims.

B

As a general rule, “an individual owns the patent rights to the subject matter of which he is an inventor, even though he conceived it or reduced it to practice in the course of his employment.” *Banks*, 228 F.3d at 1359. But there are exceptions. In the archetypal case involving an inventor’s breach of an implied-in-fact contractual obligation, an employer may be entitled to ownership rights associated with “the inventions of employees hired to direct or to engage in inventive research.” *Steranko*, 362 N.E.2d at 233 (citations omitted). Also, when an employee is specifically “directed during the course of his

rather than the company for which the individual defendants had worked); *Banks v. Unisys Corp.*, 228 F.3d 1357, 1358–59 (Fed. Cir. 2000) (same).

employment to develop or perfect new or existing machinery or processes, his employer becomes the owner of resulting inventions and may compel the assignment of patents taken in the employee's name." *Id.* at 233–34. By adhering to this rule, Massachusetts follows the law of many other states. *See, e.g., Teets*, 83 F.3d at 408 ("Even if hired for a general purpose, an employee with the specific task of developing a device or process may cede ownership of the invention from that task to the employer.") (applying Florida law); *Goodyear Tire & Rubber Co. v. Miller*, 22 F.2d 353, 356 (9th Cir. 1927) (applying federal common law).

The pertinent question is whether the employer "specifically directed" the employee to create the invention at issue. *Farmers Edge*, 970 F.3d at 1032; *Teets*, 83 F.3d at 408. "The primary factor courts consider in determining whether an employed to invent agreement exists is the specificity of the task assigned to the employee." *Farmers Edge*, 970 F.3d at 1032 (quoting *Skycam LLC v. Bennett*, 900 F. Supp. 2d 1264, 1276 (N.D. Okla. 2012)). In *Skycam*, the court correctly reasoned that if the employee was not employed or specifically directed "to invent the entirety" of the system described in a claim of the patent application for which assignment is sought, the employer "is not entitled to ownership of the invention described therein." 900 F. Supp. 2d at 1277.

To determine whether the specific goal of the RFD 02-122 project was to invent the 2002 actuator prototype—whatever its similarities to the Hawk actuator described in allowed claim 3 of the patent application—we look first to the document originating the project and delineating its scope. The RFD states that "[t]he existing flow matching valve still has three years remaining on the patents and thus the royalty. A

new design would eliminate the payment and provide a new patent valve that is owned by [Koso].” Koso anticipated that the new valve would be designed and manufactured at a cost of approximately \$100 per unit. Nothing in the RFD contemplates either the invention of a new actuator or the use of solenoid valves in an actuator. REXA did not direct Chester to invent anything remotely resembling the 2002 actuator prototype, much less the Hawk—an actuator that uses solenoid valves to hold itself in position under load, and which requires a motor that can accelerate from zero to maximum RPM under full load. So, REXA is not entitled to ownership of the invention described in the allowed claims of the patent application. See *Farmers Edge*, 970 F.3d at 1032; *Skycam*, 900 F. Supp. 2d at 1277.

The RFD’s focus on the design of a replacement flow matching valve is also consistent with the deposition testimony of Chester, who was familiar with the project’s scope. Chester testified: “We were simply looking to modify the existing Xpac to avoid the royalties ... there was never any intention to come up with any kind of new product. We were simply looking to modify the existing one to get around the royalties.” REXA does not identify contrary testimony. And whether solenoid valves were technically considered part of Koso’s “Actuator Business,” as REXA contends, is not relevant to the critical question of whether the 2002 actuator prototype was something that Koso “specifically directed” Chester to invent. *Farmers Edge*, 970 F.3d at 1032; *Teets*, 83 F.3d at 408.

REXA’s primary response to the argument that Chester was tasked with designing a replacement valve, rather than an actuator, is that it was waived or forfeited when not presented to the district court at summary judgment. But MEA

wrote: “The RFD 02-122 page describes a request to generate new valves, not a new actuator, to be designed and manufactured at a cost of \$100 per valve in an initial quantity of 2,000 per year.” For his part, Chester incorporated MEA’s arguments at summary judgment. Chester also cited to the district court his own testimony about the scope of the RFD 02-122 project. The project sought, he said, only to avoid the royalties associated with the flow matching valve that Koso was using in its existing Xpac actuators. Thus, we conclude the argument was not waived or forfeited. Regardless, we may affirm the grant of summary judgment to Chester and MEA on any properly preserved basis we find in the record. *Dibble*, 793 F.3d at 807.

The evidence establishes that Chester was not specifically directed to develop an actuator, much less the entirety of the system described in allowed claim 3 of the patent application. Rather, any direction Koso provided Chester on the RFD 02-122 project was to develop a replacement flow matching valve. Those efforts were not successful, and they are unrelated to any portion of the patent application. So, Chester did not owe Koso an implied contractual obligation to assign the intellectual-property rights related to the patent application. Because no reasonable jury could find otherwise, we affirm the district court’s grant of summary judgment to Chester on the implied-in-fact contractual claim under Massachusetts law.

C

Next, we address REXA’s allegation that Chester breached an implied contractual duty to maintain the secrecy of confidential information. This is not an independent cause of action or claim for relief. By the terms of REXA’s operative

pleading, this allegation must be part of Count IV, its claim for breach of an implied contract on patent rights. In other words, REXA suggests that if Chester misappropriated a trade secret, he also breached an implied obligation to maintain the underlying information as confidential. REXA does not argue that it pleaded an implied obligation to maintain confidential information on any other basis.

The defendants contend that the ITSA preempts recovery for the breach of an implied contractual duty to maintain the secrecy of confidential information. According to the statute, it is “intended to displace conflicting tort, restitutionary, unfair competition, and other laws of this State providing civil remedies for misappropriation of a trade secret.” 765 ILL. COMP. STAT. 1065/8(a). Through the ITSA, Illinois “abolished all common law theories of misuse of such information.” *Composite Marine*, 962 F.2d at 1265. “Unless defendants misappropriated a (statutory) trade secret, they did no legal wrong.” *Id.*

Illinois courts “have read the preemptive language in the ITSA to cover claims that are essentially claims of trade secret misappropriation.” *Spitz v. Proven Winners N. Am., LLC*, 759 F.3d 724, 733 (7th Cir. 2014) (citation omitted). That is, consistent with the law of other jurisdictions, the ITSA forecloses claims “when they rest on the conduct that is said to misappropriate trade secrets.” *Hecny Transp., Inc. v. Chu*, 430 F.3d 402, 404–05 (7th Cir. 2005) (citations omitted). In *Spitz* this court held that the plaintiff’s “quasi-contract” theories of unjust enrichment and quantum meruit were preempted by the ITSA because they were essentially claims of trade secret misappropriation. 759 F.3d at 733.

Likewise, REXA asserts that Chester breached an “implied-in-fact obligation to maintain the confidentiality of the

2002 Designs” when he incorporated them into his own inventions. This assertion is “essentially [a claim] of trade secret misappropriation.” *Id.* Chester and MEA raised the preemption issue in their brief. Yet, REXA fails to explain how its implied-confidentiality allegations, which are part and parcel of the claim for breach of an implied contract pleaded in Count IV, differ materially from those underlying a trade secret claim. Those allegations are thus precluded by the ITSA, which establishes the standard for proving allegations of misappropriation.

IV

REXA also challenges the district court’s award of attorneys’ fees to Chester and MEA. This presents two questions for us. First, we consider whether the district court abused its discretion in finding that REXA committed litigation misconduct, for which the court imposed attorneys’ fees as a sanction. Second, we analyze whether the court abused its discretion by awarding approximately \$2.357 million in fees.

A

Start with the district court’s decision to sanction REXA for litigation misconduct. “We review a district court’s imposition of sanctions under its inherent authority for an abuse of discretion.” *Tucker v. Williams*, 682 F.3d 654, 661 (7th Cir. 2012) (citing *Chambers v. NASCO, Inc.*, 501 U.S. 32, 55 (1991)). Under that standard, “the district court’s decision is to be overturned only if no reasonable person would agree with the trial court’s ruling.” *Aldridge v. Forest River, Inc.*, 635 F.3d 870, 875 (7th Cir. 2011); accord *Lange v. City of Oconto*, 28 F.4th 825, 842 (7th Cir. 2022). A court may abuse its discretion if it bases its decision “on an erroneous view of the law or a clearly erroneous

evaluation of evidence.” *Harrington v. Duszak*, 971 F.3d 739, 741 (7th Cir. 2020) (citation omitted).

Before imposing sanctions for litigation misconduct, the district court must make a finding of “bad faith, designed to obstruct the judicial process, or a violation of a court order.” *Fuery v. City of Chicago*, 900 F.3d 450, 463–64 (7th Cir. 2018) (quoting *Tucker*, 682 F.3d at 662). “Mere clumsy lawyering is not enough.” *Id.* at 464. When findings of bad faith are properly made, district courts have inherent authority to award attorneys’ fees as a sanction. *Chambers*, 501 U.S. at 45-47.

REXA contends the district court’s finding of litigation misconduct was unsupported and thus an abuse of discretion. Before concluding that REXA had committed misconduct, the district court found the following facts:

- Appendix A, the list of Koso employees who were offered the Severance Plan, was produced in a deceptive manner. The list was detached from the Severance Plan to which it was originally attached, and it was produced nearly 100 pages away from the Bonus Letter.
- Appendix B, the Confidentiality Agreement, was produced as an attachment to the Bonus Letter. Chester never received the Confidentiality Agreement.
- Geoffrey Hynes, REXA’s president, testified that he may have “connected” the Severance Plan and its Appendix B Confidentiality Agreement to the Bonus Letter.

REXA forthrightly acknowledges that “all of these facts are true.” Nevertheless, REXA argues, the district court abused its discretion in declining to accept REXA’s assertion that all documents were produced as they were kept in the ordinary course of business.

We disagree. In the district court’s view, it was exceedingly unlikely that the unusual, suspicious alignment of REXA’s files had occurred in the absence of any manipulation by REXA or its attorneys. Importantly, the district court is closer to the litigation and more familiar with the details of the dispute at issue than we are. *See, e.g., Fuery*, 900 F.3d at 452 (“[W]e leave much of the trial refereeing to those on the field—the district courts.”); *Method Elecs., Inc. v. Adam Techs., Inc.*, 371 F.3d 923, 925 (7th Cir. 2004) (“We review the grant of sanctions with deference because of the familiarity of the trial court with the relevant proceedings.”). On appeal, REXA has not given us any reason—aside from bare assertions—to overturn the district court’s findings. We cannot say that “no reasonable person would agree with the trial court’s ruling.” *Aldridge*, 635 F.3d at 875. Thus, the district court did not abuse its discretion when it found that REXA had committed litigation misconduct.

Like the district court, we are disturbed by the conduct of REXA’s counsel in the use of exhibits at Chester’s deposition. It is undisputed that REXA created a combined exhibit, which contained both the Bonus Letter and the Appendix B Confidentiality Agreement. The Bonus Letter and Appendix B were given consecutive Bates numbers in the combined document. Even if we were to accept REXA’s dubious assertion that the files were kept this way in the ordinary course of business, its creation of the combined exhibit was dishonest.

REXA acknowledges that it used the combined exhibit to question Chester at his deposition. REXA tried to get Chester to admit that he had received the Appendix B Confidentiality Agreement. These facts are highly suggestive of litigation misconduct. On appeal, REXA is unrepentant, asserting “[i]t would have been remiss if REXA’s attorneys had *failed* to ask Chester to confirm or deny” the assertion made by REXA’s former president that he had presented Chester with the Appendix B Confidentiality Agreement. But such sharp tactics—manipulating documents in an attempt to mislead a witness—are improper, and they support a trial court’s decision to sanction the responsible party.⁶ Once REXA’s tactics were discovered, the district court was well within its discretion to decide that litigation misconduct had been committed and to exercise its inherent authority by imposing a penalty.

In its reply brief, REXA also argues that the district court was precluded from finding that REXA had committed litigation misconduct without first holding an evidentiary hearing. But REXA waived this argument by failing to mention it in the company’s opening brief on appeal. *See White v. United States*, 8 F.4th 547, 552–53 (7th Cir. 2021) (citations omitted).

⁶ *See Ramirez v. T&H Lemont, Inc.*, 845 F.3d 772, 776, 778–79 (7th Cir. 2016) (litigation misconduct during discovery, including a litigant’s “attempts to deceive his opponent,” supports the severe sanction of dismissal with prejudice under the district court’s inherent authority—even when the misconduct is shown only by a preponderance of the evidence); *cf. Goodyear Tire & Rubber Co. v. Haeger*, 137 S. Ct. 1178, 1184, 1186 (2017) (the concealment of records requested by an opposing litigant during discovery supports sanctions under the trial court’s inherent authority); *Martin v. Redden*, 34 F.4th 564, 566–68 (7th Cir. 2022) (per curiam) (a litigant’s submission of a falsified document to the court supports the severe sanction of dismissing his case with prejudice).

The argument also lacks merit. A district court's decision not to hold a hearing is reviewed for abuse of discretion, *Elustra v. Mineo*, 595 F.3d 699, 710 (7th Cir. 2010), and a court "has discretion to deny an evidentiary hearing if the [a]ppellants cannot show that an evidentiary hearing would have an articulable bearing on the material issues in dispute." *Sullivan v. Running Waters Irrigation, Inc.*, 739 F.3d 354, 359 (7th Cir. 2014). Moreover, a court does not abuse its discretion by not conducting "an evidentiary hearing that would only address arguments and materials already presented to the court in the parties' briefings." *Royce v. Michael R. Needle P.C.*, 950 F.3d 481, 487 (7th Cir. 2020) (citations omitted) (making this observation in the context of a challenge to the appropriate amount of fees).

REXA did not request an evidentiary hearing in the district court, and it has not explained how a hearing would have affected the court's assessment of the dispute. The parties' contentions on REXA's discovery misconduct were presented in their summary judgment briefs. REXA thus cannot use the lack of an evidentiary hearing to overturn the finding of litigation misconduct on appeal.

Though the district court had a sound basis to find litigation misconduct, we agree with REXA that its use of "REXA" to refer to Koso, in pleadings and other litigation filings, is insufficient to support that finding. As discussed in Section III.A, we decline to hold that the differences between these two corporate entities are dispositive of REXA's claim against Chester for breach of an implied-in-fact contractual obligation. Unlike the district court, we are not convinced that REXA's use of more precise nomenclature would have obviated the need for this lawsuit to proceed through discovery.

REXA's manipulation of documents and attempts to mislead Chester at his deposition, rather than the use of "REXA" as purported shorthand for "Koso," is sufficient to support the district court's finding of litigation misconduct and sanctions.

B

Last, we consider whether the district court abused its discretion in awarding the full amount of the attorneys' fees that Chester and MEA requested, which totaled approximately \$2.357 million. Attorneys' fees that are imposed as a sanction pursuant to a trial court's inherent authority "may go no further than to redress the wronged party for losses sustained," and the court "may not impose an additional amount as punishment for the sanctioned party's misbehavior." *Goodyear Tire & Rubber Co. v. Haeger*, 137 S. Ct. at 1186 (internal quotation marks and citations omitted). We review the court's award of fees for reasonableness. *See Hunt v. Moore Bros., Inc.*, 861 F.3d 655, 661 (7th Cir. 2017); *Rexam Beverage Can Co. v. Bolger*, 620 F.3d 718, 738 (7th Cir. 2010).

In examining fee awards, we apply a "highly deferential abuse of discretion standard." *Pickett v. Sheridan Health Care Ctr.*, 664 F.3d 632, 639 (7th Cir. 2011) (quoting *Est. of Borst v. O'Brien*, 979 F.2d 511, 514 (7th Cir. 1992)). A district court is accorded significant deference in matters concerning attorneys' fees because (1) the trial court possesses a superior understanding of the factual matters at issue; (2) that superior understanding outweighs the need for uniformity in fee awards; and (3) it is important to avoid, wherever possible, expending the resources associated with conducting a "second major litigation" concerning fees. *Id.* (citing *Spellan v. Bd. of Educ. for Dist. 111*, 59 F.3d 642, 645 (7th Cir. 1995)).

At the same time, our court has acknowledged that limits exist on a district court's discretion in calculating and awarding attorneys' fees. Under our case law, a court's latitude in this area is "not unlimited" and the court "still bears the responsibility of justifying its conclusions." *Sottoriva v. Claps*, 617 F.3d 971, 975 (7th Cir. 2010). The court's explanation for the amount of fees it awards "may be concise ... but it must still be an *explanation*—that is, a rendering of reasons in support of a judgment—rather than a mere conclusory statement." *Id.* at 976 (citation omitted).

"When substantial fees are at stake, the district court must calculate the award with greater precision." *Schlacher v. L. Offs. of Phillip J. Rotche & Assocs., P.C.*, 574 F.3d 852, 857 (7th Cir. 2009) (citing *Vukadinovich v. McCarthy*, 59 F.3d 58, 60 (7th Cir. 1995)). Requiring a greater degree of formality in cases where the stakes are higher "is a general principle of the law" that applies to attorneys' fees. *Vukadinovich*, 59 F.3d at 60. In a sizable case such as this, the stakes involved in calculating and awarding attorneys' fees are higher than usual, and so is the corresponding burden on the trial court to wade through the details of the fee application. *In re Cont'l Ill. Sec. Litig.*, 962 F.2d 566, 570 (7th Cir. 1992).

REXA made numerous objections to the fees claimed by Chester and MEA. The district court summarily overruled each of these objections and entered judgment for the defendants in the full amount of attorneys' fees and costs they had requested—\$2,357,071.12. We consider the district court's explanation, given the substantial sum of fees at issue.

In its opposition to Chester and MEA's fee petition, REXA objected to what it categorized as the following groups of billing entries:

- Time spent performing duplicative tasks;
- Time spent preparing and filing unnecessary motions;
- Time spent conducting redactions of confidential information;
- Billing entries containing vague narrative descriptions; and
- Billing entries reflecting excessive time billed by partners for tasks that associates could have performed.

The district court did not address any of these specific objections. Instead, it concluded that any and all time the defendants' attorneys spent litigating this case "was necessitated by the unreasonable demands of [REXA's] counsel in the first instance." Finding that REXA's attorneys' fees were equal to or exceeded those incurred by Chester and MEA, the district court "reject[ed] both [REXA's] arguments and its calculus."

Based on the record before us, we conclude that the district court did not adequately justify its decisions on each of REXA's discrete objections to the defendants' fee petition. *See Sottoriva*, 617 F.3d at 976. Given the sizable fee award, it was necessary to consider each of these objections. So, too, was an examination required of the reasonableness of the hours that defense counsel expended—and the dollar amounts claimed—for defending against the lawsuit at each stage of the case.

Setting aside whether the district court's explanation might have been sufficient to support a small or moderately sized fee award, it is not an adequate basis on which to sustain

the substantial sum of fees the court awarded. *Cf. Schlacher*, 574 F.3d at 857–59 (affirming the sufficiency of the district court’s explanation for awarding \$6,500 of the \$12,495 in fees the plaintiffs had sought, while noting that “greater detailed findings in calculating the fee award might have been required in a higher-stakes case”). Because Chester and MEA petitioned the district court for more than \$2 million in attorneys’ fees, it was incumbent on the court to make specific findings about each of REXA’s objections to the fee petition.

For instance, the court should have addressed REXA’s contentions that Chester and MEA improperly petitioned for fees associated with time their attorneys spent performing duplicative tasks and preparing unnecessary motions. *See id.* at 858 (“[O]verstaffing cases inefficiently is common, and district courts are therefore encouraged to scrutinize fee petitions for duplicative billing when multiple lawyers seek fees.”). Likewise, REXA’s objection that Chester and MEA sought reimbursement at partner rates for associate-level tasks warranted the trial court’s review. The court’s orders do not disclose any such analysis, so we cannot determine whether, or to what extent, it considered those specific objections. We hold therefore that “the district court’s ruling was not sufficiently explained.” *Sottoriva*, 617 F.3d at 976. A remand is necessary so that the court may give a more fulsome explanation.

On remand, the district court should keep in mind that it may award fees pursuant to its inherent authority to sanction misconduct in an amount sufficient to compensate the defendants for the losses they sustained as a result of REXA’s manipulation of documents and its attempts to mislead Chester. *See Goodyear Tire & Rubber Co. v. Haeger*, 137 S. Ct. at 1186. When engaging in this analysis, the court should consider

each objection listed in the parties' joint statement on the fee petition. Although the court "need not undertake a line-by-line inquiry" of Chester and MEA's billing statements, *Nichols v. Ill. Dep't of Transp.*, 4 F.4th 437, 444 (7th Cir. 2021), it should review representative billing entries related to each specific objection made by REXA. Oral or written findings, as to each objection, will assist in this task. Based on its analysis of those representative entries, the court may reach a conclusion as to whether any portion of the requested fees is excessive. If the fees are excessive in any respect, such as because the attorneys engaged in overlapping work that was inefficient, a reduction in fees is warranted. *See Schlacher*, 574 F.3d at 858–59. Should the district court conclude a reduction in the fee award is warranted, it should explain its choice to apply a discount in that amount.

Our decision today does not mean that awarding \$2.357 million in attorneys' fees—or awarding the full amount requested by the prevailing party when a large sum is at stake—is necessarily an abuse of discretion, regardless of context. Rather, we conclude that more explanation to support the ruling on fees is required here. The court must address what amount of fees are traceable to the litigation misconduct, and it may not impose an additional amount as punishment. *Haeger*, 137 S. Ct. at 1186.

V

For these reasons, we AFFIRM the district court's grant of summary judgment to Chester and MEA on REXA's claim for misappropriation of trade secrets and to Chester on REXA's claim for breach of an implied-in-fact contract. The portion of the judgment awarding attorneys' fees to Chester and MEA is

VACATED, and this case is REMANDED for proceedings consistent with this opinion.