

United States Court of Appeals For the First Circuit

Nos. 07-2615, 07-2616

MASSACHUSETTS EYE AND EAR INFIRMARY,
Plaintiff/Counterclaim Defendant-Appellee/Cross-Appellant,

v.

QLT PHOTOTHERAPEUTICS, INC.,

Defendant.

QLT, INC.,

Counterclaim Plaintiff, Appellant/Cross-Appellee,

v.

MASSACHUSETTS EYE AND EAR INFIRMARY;
EVANGELOS S. GRAGOUDAS, M.D.; JOAN W. MILLER, M.D.,
Counterclaim Defendants, Appellees/Cross-Appellants.

APPEALS FROM THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MASSACHUSETTS

[Hon. William G. Young, U.S. District Judge]

Before

Howard, Baldock* and Selya, Circuit Judges.

Richard G. Taranto, with whom Farr & Taranto, Donald R. Ware,

*Of the Tenth Circuit, sitting by designation.

Sarah Cooleybeck, Jeff Bone, Foley Hoag LLP, Aaron M. Panner, Kellogg, Huber, Hansen, Todd, Evans & Figel, PLLC, were on brief for appellant/cross-appellees.

Kenneth B. Herman, with whom James F. Haley, Jr., Christopher J. Harnett, Karen Mangasarian, John D. Donovan, Jr., F. Turner Buford and Ropes & Gray, LLP, were on brief for appellee/cross-appellant.

January 12, 2009

HOWARD, Circuit Judge. These appeals require us to grapple with the metes and bounds of Massachusetts unjust enrichment and restitution law. Like many such cases, the present case involves one party's conferral of a valuable benefit during ongoing contract negotiations, followed by an irreparable breach in the bargaining process. What makes this case unusual is that its subject matter -- the development of a blockbuster pharmaceutical -- poses challenges in valuing the benefit conferred, and potentially implicates federal patent law. Defendant QLT Phototherapeutics, Inc. ("QLT") appeals a jury finding that it was unjustly enriched because plaintiff Massachusetts Eye and Ear Infirmary ("MEEI") conferred on QLT several benefits during the course of the development of Visudyne, a successful (and highly profitable) treatment for age-related macular degeneration ("AMD"), a leading cause of adult blindness.

In a prior opinion, we concluded that MEEI was entitled to a trial on two theories supporting its unjust enrichment claim, as well as a misappropriation of trade secrets claim and claims arising under the Massachusetts Unfair Trade Practices statute, Mass. General Laws ch. 93A §§ 2, 11 ("Chapter 93A"). Mass. Eye & Ear Infirm. v. QLT Phototh., Inc., 412 F.3d 215 (1st Cir. 2005) ("MEEI-II"). After trial, a jury found that QLT was unjustly enriched, and that it had committed unfair trade practices in violation of Chapter 93A. The jury awarded MEEI a running royalty

of 3.01% of global net Visudyne sales as damages. QLT prosecutes its ensuing appeal with great vigor. For the sake of simplicity, we group QLT's assignments of error into five clusters relating to (1) the imposition of unjust enrichment liability, (2) the measure of unjust enrichment damages, (3) the unfair trade practices claim, (4) the conduct of the trial, and (5) the post-trial attorneys' fee award. MEEI has cross-appealed. This cross-appeal is largely protective; in all events, with two exceptions, we need not discuss the cross-appeal.

As to most of the grounds of MEEI's cross-appeal and QLT's appeal, including MEEI's claim that it is entitled to exemplary damages under Chapter 93A, we detect no error or infirmity in the proceedings below. The other issue raised in both the cross-appeal and QLT's appeal that bears discussion is the parties' query about the size of MEEI's attorneys' fee award. We are unable meaningfully to evaluate this claim of error, because the record is incomplete. We therefore affirm the district court judgment except for the fee award, which we vacate and remand to give the district court an opportunity to construct a more complete record.

I. Background

The proceedings in this dispute over the rights to the income stream of Visudyne have spanned nearly a decade. Although our prior decision described the background of the dispute, QLT

argues that the jury verdict is not supported by sufficient evidence. Consequently, we adumbrate the conflict between the parties and some of the evidence developed at trial.¹ We augment this discussion as necessary to complete our analysis.²

Visudyne traces its ancestry to a field of cow parsley located on a remote island north of Vancouver, Canada. Dr. Julia Levy,³ an immunologist at the University of British Columbia, learned by happenstance that her children's burn-like lesions resulted from contact with a photosensitizer chemical found in cow parsley that, when activated by light, literally burned them. This led Dr. Levy to orient her research to photodynamic therapy ("PDT"), which uses light to activate photosensitizer compounds. Photodynamic therapy works by shining light on the photosensitizer, which energizes the photosensitizer and transforms it into a toxic chemical.

Successful exploitation of this light-induced toxicity for therapeutic purposes requires "targeting" the photosensitizer

¹We evaluate the verdict with customary deference, and present the facts in the light most favorable to the verdict. See Azimi v. Jordan's Meats, Inc., 456 F.3d 228, 232 (1st Cir. 2006).

²We also note that the trial court has made contemporaneous and independent findings of fact on which we rely for the narrative that follows. See Mass. Eye & Ear Infirm. v. QLT Inc., 495 F. Supp.2d 188, 199, n.5 ("MEEI-III").

³Dr. Julia Levy was a founder of QLT, and served in several senior management positions within the company.

so that it kills only unwanted cells. Dr. Levy eventually helped develop a proprietary photosensitizer called benzoporphyrin derivative monoacid ("BPD"), which had a unique ability to deliver itself to new blood vessels immediately upon injection. BPD proved to be a compound with several other attributes that made it a promising candidate for photodynamic therapy: BPD could absorb light at a wavelength that penetrates animal tissue, and in a liposomal formulation, it could be absorbed by certain blood cells, allowing for the possibility of destroying such unwanted blood cells. QLT eventually acquired the sole right to license BPD from the University of British Columbia. In exchange for this patent right, QLT agreed to pay a royalty of 2% of net sales.

Although BPD held promise, it was, for a time, a drug in search of a disease. Dr. Levy initially hoped to develop the drug as a cancer treatment. This was the state of affairs when Dr. Levy first made contact with researchers at Massachusetts General Hospital ("MGH"), and later, MEEI.

Dr. Levy's contacts at MGH, Drs. Tayyaba Hassan, Reginald Birngruber and Ursula Schmidt-Erfurth, collaborated on using photodynamic therapy to close blood vessels initially in chick embryos, and later, in rabbit eyes. In due course, this group experimented with a variety of compounds for this purpose, including BPD, which was obtained from QLT.

Eventually, Dr. Schmidt-Erfurth brought the BPD compound to the attention of MEEI. Dr. Schmidt-Erfurth proposed studying the use of BPD to treat intraocular tumors and, at the suggestion of Dr. Evangelos Gragoudas, to close normal choroidal blood vessels without damaging the retina.

Independently, Dr. Gragoudas hired Dr. Joan Miller, a former MEEI fellow, to investigate whether BPD could be used to treat AMD -- an ocular disease that is the predominant cause of blindness in individuals over age fifty. The condition takes two forms: "dry" and "wet." Although the wet form accounts for only 10% of all occurrences of AMD, it leads to the condition known as either choroidal neovasculation ("CNV") or neovasculation, which causes 90% of AMD-related vision loss. CNV is the result of the proliferation of unwanted blood vessels in the choroid. Thus, closing such vessels would effectively palliate AMD.

Dr. Miller conducted her experiments using primate eyes, which, like human eyes, have retinas and retinal vessels. The rabbit eyes that Dr. Schmidt-Erfurth used to conduct her experiments lacked retinal vessels. This was a consequential distinction: in the early 1990s, the prevailing view held that the most cogent way to prove that PDT could be used to treat AMD was to show that PDT could close the abnormal choroidal vessels that cause CNV without damaging the underlying, healthy retinal vessels. This demonstration was important because damage to normal retinal

vessels would lead to a loss of vision. Consequently, Dr. Schmidt-Erfurth's experiments on rabbit eyes, which lack such normal vessels, could not predict PDT's suitability for use in treating AMD.

Dr. Miller obtained access to BPD pursuant to material transfer agreements with QLT. QLT did not provide any funding for Dr. Miller's initial research. Dr. Miller's BPD-based experiments proved successful. She showed that BPD was a promising photodynamic agent for the treatment of age-related macular degeneration. Armed with more BPD (but still no QLT funding), Dr. Miller conducted additional experiments designed to determine the maximum irradiance level with which a laser could be used to activate BPD without damaging the eye. The significance of higher irradiance levels was their ability to reduce treatment times, thereby making treatments using BPD a substantially more practical therapy for AMD. As a result of these experiments, a QLT representative observed that BPD had finally found its disease: it could be used to treat age-related macular degeneration.

Energized by Dr. Miller's findings, QLT executed a preclinical agreement, in which it agreed to fund Dr. Miller's further investigations of BPD. In addition, QLT and Dr. Miller

signed confidential disclosure agreements and additional material transfer agreements.⁴

Dr. Miller's additional experiments were successful, and her preclinical report subsequently formed the basis of the federal Food and Drug Administration's ("FDA") permission to initiate clinical trials in humans. In the year 2000, after several years of clinical trials in relation to which Dr. Miller drafted the clinical protocols and served as principal investigator, the FDA approved the BPD-based process for treating age-related macular degeneration. This treatment is marketed as Visudyne.

A. QLT's Distribution Partnership with CIBA Vision

Long before final FDA approval, the parties recognized the potential for Visudyne's commercial exploitation. In November 1993, Dr. Ed Levy approached CIBA Vision (sometimes "CIBA"),⁵ a Swiss company, about a partnership for manufacturing and distributing what became Visudyne. To entice CIBA Vision, Dr. Ed Levy provided it with a some of Dr. Miller's confidential

⁴The June 1994 Material Transfer Agreement as presented to Dr. Miller purported to grant QLT a "worldwide royalty free non-exclusive license." But Dr. Miller crossed out this clause before signing the agreement, QLT did not object, and continued to supply Dr. Miller with BPD.

⁵CIBA Vision is now known as Novartis Ophthalmics, Inc., but for the sake of simplicity we continue to refer to CIBA Vision as a separate entity.

research.⁶ This disclosure violated the material transfer and confidentiality agreements between Dr. Miller and QLT, which permitted QLT access to Dr. Miller's research results but explicitly prohibited QLT from disclosing those results to third parties.⁷ Dr. Ed Levy made several other unauthorized disclosures. For example, in a January 1994 meeting with CIBA, QLT disclosed additional treatment parameters gleaned from Dr. Miller's work. Such disclosures served their intended purpose: they whetted CIBA's appetite.

After it was informed that Dr. Miller was planning to disclose much of her research at an ophthalmology conference in the spring of 1994, CIBA Vision requested prompt access to Dr. Miller's work. Realizing that CIBA Vision was developing its own photosensitizer agent, QLT promised to share all of Dr. Miller's experimental data even though QLT was precluded from making such a disclosure without Dr. Miller's consent.

QLT further determined that it would be advantageous to have Dr. Miller present her research to CIBA Vision. Consequently,

⁶Dr. Ed Levy, the husband of Dr. Julia Levy, was another senior officer of QLT.

⁷As part of the Confidential Disclosure Agreement, QLT promised "not to use the Confidential Information for any purpose other than the evaluation of Products under the terms of the Agreement" and "to maintain Confidential Information in confidence." The parties further agreed that "misuse or improper disclosure of Confidential Information would irreparably harm the business of the disclosing party or that party's affiliates." See MEEI-II, 412 F.3d at 222.

QLT approached Dr. Miller and requested that she make such a presentation. Dr. Miller was reticent about disclosing her results because QLT and MEEI had not yet negotiated a licensing arrangement for her treatment, but Dr. Ed Levy promised Dr. Miller that QLT would enter into a licensing agreement with MEEI. In early March of 1994, QLT confirmed in writing its promise to license Dr. Miller's treatment from MEEI. Armed with these assurances, Dr. Miller agreed to make a presentation of her confidential work to CIBA Vision. Still, as late as the car ride to the meeting, Dr. Miller expressed concerns to the Levys about discussing her confidential work without a formal, written licensing agreement in place. The Levys again assured her that QLT would protect the information that she was about to present to CIBA Vision, that QLT would license the treatment from MEEI, and that QLT would treat MEEI fairly.

Pleased with Dr. Miller's presentation, CIBA Vision expressed a desire to enter into a partnership with QLT. CIBA Vision executed a Letter of Understanding in which it wrote:

Dr. J Miller's (Harvard University) presentation has impressed and convinced us that Photodynamic Dynamic Therapy will be the treatment of Age-related macular degeneration of the future. We would therefore appreciate a joint development . . . under the CIBA-umbrella agreement.

This letter was followed by a more detailed Letter of Intent between CIBA Vision and QLT in May of 1994.

Around the time that this Letter of Intent was signed, Dr. Miller made portions of her research findings public at an ophthalmology conference, as both QLT and CIBA Vision anticipated. Indeed, Dr. Miller made additional presentations to a CIBA Vision representative at the same conference.

Thereafter, CIBA Vision continued to press QLT for additional information from Dr. Miller's research, as well as for her personal involvement in briefings. CIBA wrote that it was "essential that Dr. Miller share[] all the information and statistics with us" (emphasis in original). In addition, CIBA wrote that it was "essential" that Dr. Miller "does give a demonstration" directly to CIBA representatives.

After further promises of a license and fair compensation, Dr. Miller acceded to CIBA Vision and QLT's requests. Subsequently, in February 1995, QLT signed a definitive agreement with CIBA Vision.

B. The Patent Application Process

We come now to the patent application process, another major strand of the dispute between the parties. Because Dr. Miller disclosed important facets of her research results in abstracts published on March 15, 1993, a patent application had to be filed by March 15, 1994. See 35 U.S.C. § 102(b). In late February and early March of 1994, MEEI informed QLT that it wanted to patent the process that Drs. Miller's and Gragoudas' research

had spawned. QLT suggested the use of its patent attorney but indicated that it did not see itself as an inventor of the process. Moreover, QLT reiterated its desire to license the treatment from MEEI. QLT memorialized these comments in several letters. In addition, although QLT noted the possibility that non-QLT employees might claim co-inventorship status, QLT promised to compensate MEEI based on MEEI's sole ownership of the contemplated patent.

Based primarily on her discussions with Dr. Miller, QLT's patent attorney drafted patent application 08/209,473 ("the '473 application").⁸ The '473 application named only three inventors, all affiliated with MEEI: Drs. Miller, Gragoudas, and Lucy Young (another MEEI researcher). Soon after the '473 application was filed, Dr. Hassan learned that she had not been named an inventor, and she objected.

Further complicating matters, QLT argued that the portion of the '473 application dealing with age-related macular degeneration had to be refocused in light of the prior art. In a contemporaneous letter to CIBA, however, QLT clarified that its concern went beyond determining the proper scope and inventorship of a potential Visudyne patent; QLT wanted to maintain control of the application process. Dr. Ed Levy wrote:

⁸The '473 application described several claims. Claim 1 described a "method to treat conditions of the eye characterized by unwanted neovasculature," while claim 2 was directed specifically to choroidal neovasculature.

At one point we verbally conveyed to MEEI a more negative view of the prospects [of the '473 application] and our willingness to continue funding the application. Their response was roughly "send us the file." We chose to soften our position so that we could maintain control of the process. . . .

Dr. Levy further explained that QLT was not yet in a propitious position to challenge Dr. Miller or MEEI because the '473 application listed only MEEI inventors:

What all this amounts to is that there will be additional negotiations with Joan [Dr. Miller] and MEEI over these matters, so even though we hold almost all of the cards, we do not want to muddy the waters. For all I know there may be other reasons not to get into a pissing match with Joan (excuse the technical language)-e.g. she made important contributions to the preclinical proof of principle and she could be an extremely valuable clinical investigator--but it seems to me that the patent negotiations alone are a sufficient reason for all of us to proceed carefully with Joan and her colleagues.

Having retained control of the patent application process, QLT suggested amending the application to cover narrower claims involving liposomal preparations of BPD. (The original application involved LDL-based BPD). Such a limitation would permit Dr. Julia Levy to be added to the patent application as a co-inventor. Initially, QLT's patent attorney rejected this limitation. The parties remained unable to reach agreement on the proper scope of the Visudyne patent application.

Stymied, Dr. Murashige, QLT's patent attorney, suggested that all concerned parties -- MGH, MEEI, and QLT -- meet in December 1994 to resolve the inventorship dispute. Prior to the meeting, MEEI researchers were resistant to broadening the inventorship of Visudyne because of concerns that added inventors would reduce the amount of future royalties that MEEI could expect. To counter these concerns, QLT assured MEEI that a fair business arrangement would be made regardless of how inventorship was sorted out.

At the meeting, all those claiming potential co-inventor status, each with the guidance of independent counsel, explained their claimed roles in the process. Rather than argue about who did what, Dr. Murashige suggested that the parties file a broader patent application that would include additional inventors. It was understood that this broadened patent application would be jointly assigned to MEEI, MGH, and QLT because personnel from all three institutions were co-inventors under this broadened application.

MEEI and its researchers remained wary of this prospect. Following the meeting, Dr. Miller continued to express her concerns about dropping the '473 application and filing a broader application listing additional inventors. But the Levys again reassured her that QLT would compensate MEEI as the sole inventor, regardless of how the patent application was ultimately drafted.

As a result of these assurances, MEEI, Drs. Miller, and Gragoudas acquiesced to QLT's preferred approach. Consequently, QLT's patent attorney filed continuations-in-part canceling the '473 application and reworked the canceled claims, which she filed as part of a broader patent application, the "'591 application." Thus, based on QLT's promise that MEEI would be treated as the sole owner of the treatment method for age-related macular degeneration, MEEI agreed to merge its patent claims into two dependent claims (numbers 7 and 14) of the '591 application, with the consequent addition of researchers from MGH and Dr. Julia Levy of QLT as co-inventors.

C. Licensing Negotiations

Dr. Miller and MEEI consistently pressed QLT to negotiate a license agreement, which QLT delayed.⁹ In the interim, QLT consistently obtained Dr. Miller's cooperation with promises of a fair licensing agreement while deferring the actual negotiations of the agreement until it held "almost all of the cards." But the parties did eventually begin negotiations. Once the parties began negotiating a license, it became clear that they entertained

⁹QLT wrote in a letter to MEEI that it was "actively prosecuting [the '591 application] in a number of jurisdictions around the world." QLT further stated its intention "to negotiate in good faith" with the other assignees "when it is clear patents will be issued and feasibility of the [i]nvention is proven."

diametrically opposed notions of what constituted a "fair business arrangement."

In late 1995, Dr. Miller handed Dr. Julia Levy a draft license agreement, which contained a royalty rate of 5% of net sales in jurisdictions covered by an MEEI patent. On receiving the draft, Dr. Levy reassured Dr. Miller that QLT wanted to license Visudyne from MEEI. QLT followed this conversation with a letter stating that it considered itself free, "as a co-assignee to practice the invention [Visudyne] independently." Nevertheless, QLT wrote that it intended to negotiate in good faith with MEEI and MGH to "come to an agreement on reasonable terms and royalty rates which will be consistent with industry standards under similar circumstances."

The U.S. Patent and Trademark office allowed the claims of the '591 application, which issued as the '349 patent. Immediately thereafter, at MEEI's urging, license negotiations resumed in earnest. QLT's initial position was that it didn't need a license to sell Visudyne, but wished to recognize the contributions that MGH and MEEI had made to Visudyne's development. Consequently, QLT offered MEEI a one-time \$200,000 research grant, and made a similar offer to MGH. About a month later, QLT advanced another proposal, offering MEEI a royalty of 0.2% of sales in jurisdictions covered by patents. MGH eventually proposed and QLT agreed to a royalty rate of 0.5% of sales in the U.S. and Canada,

along with a "most favored nation" clause obligating QLT to make any more advantageous license terms it negotiated with MEEI available to MGH.¹⁰ QLT offered similar terms to MEEI. But MEEI continued to press for better terms on the theory that QLT should not be a co-assignee, and therefore QLT should -- consistent with its prior promises -- compensate MEEI as though MEEI was the sole inventor of Visudyne. Around the same time, MEEI indicated to MGH that, in the interest of reaching a deal, it was willing to accept a 3% royalty, which it would split with MGH. In its proposal to QLT, MEEI demanded an up-front payment of \$2,000,000 and a 3% royalty on net sales of any product intended for treatment of unwanted neovasculation of the eye using BPD. Further negotiations broke down, and this suit followed.¹¹

¹⁰The evidence at trial suggested that MGH accepted this proposal because it felt it had no other leverage, and because it did not want to disrupt its ongoing arrangement with QLT. Furthermore, the jury considered the fact that one of the MGH researchers involved in the licensing discussions was on QLT's scientific advisory board.

¹¹MEEI later applied for and obtained a separate patent, No. 6,225,303 ("the '303 patent"), which contained claims similar to the '349 patent but included an irradiance range not contained in the '349 patent. MEEI then sued CIBA and QLT for infringement of the '303 patent.

The district court granted summary judgment to QLT. See Mass. Eye & Ear Infirm. v. Novartis Ophthal., Inc., 353 F. Supp.2d 170 (D. Mass. 2005). MEEI appealed, and the Federal Circuit found that the question of inventorship presented a triable issue of material fact. See Mass. Eye & Ear Infirm. v. Novartis Ophthal., Inc., 199 Fed. App'x 960 (Fed Cir. 2006). This litigation eventually settled and the present suit represents the only vehicle through which MEEI

D. Proceedings Below

MEEI brought the present suit in the United States District Court for the District of Massachusetts, alleging a number of claims, including breach of express contract, breach of implied contract, breach of the covenant of fair dealing, conversion, misrepresentation, unjust enrichment based on the disclosure of MEEI's confidential information, unjust enrichment based on the joinder of MEEI's claims to the '591 application, misappropriation of trade secrets, and unfair and deceptive trade practices. The trial court granted QLT summary judgment on all claims. On appeal, we affirmed in part but remanded the case for trial on two theories of unjust enrichment: (disclosure of confidential information and the patent application theory), as well as on the claim for trade secrets misappropriation, and the Chapter 93A claim. See generally, MEEI-II.

The parties conducted a spirited trial, which lasted thirteen days. At the close of MEEI's evidence, the trial court granted QLT's motion for judgment as a matter of law on the misappropriation of trade secrets claim. In addition, the court granted QLT judgment with respect to the Chapter 93A claim, to the extent it relied on the trade secrets claim. The trial continued with respect to the unjust enrichment claims and the remainder of the Chapter 93A claim.

is seeking damages arising out of the development of Visudyne.

After extensive wrangling about jury instructions, the remaining claims went to the jury. The jury found QLT liable for unjust enrichment and a violation of Chapter 93A, and it ordered QLT to pay MEEI a running royalty of 3.01% of Visudyne's gross sales as damages. The jury, however, did not find that QLT's Chapter 93A violation was knowing or willful, and therefore did not award enhanced damages as allowed by the statute. The trial court denied QLT's post-trial motion for judgment as a matter of law, entered judgment on the jury verdict, and awarded MEEI pre-judgment interest. It also awarded MEEI \$14,093,855.42 in attorneys' fee. This appeal and cross-appeal timely followed.

II. Discussion

We review the district court's denial of a motion for judgment as a matter of law, including legal decisions made therein, de novo. Ramos v. City of Mayaguez, 467 F.3d 16, 22 (1st Cir. 2006). But a jury's verdict and factual findings "must be upheld unless the facts and inferences viewed in the light most favorable to the verdict point so strongly and overwhelmingly in favor of the movant that a reasonable jury could not have returned the verdict." Borges Colon v. Roman Abreu, 438 F.3d 1, 14 (1st Cir. 2006) (quoting Acevedo Diaz v. Aponte, 1 F.3d 62, 66 (1st Cir. 1993)) (internal quotation, alternations, and citations omitted); see also Crowley v. L. L. Bean, Inc., 303 F.3d 387, 393 (1st Cir. 2002) ("Our review is weighted toward preservation of the jury

verdict, for we affirm unless the evidence was so strongly and overwhelmingly inconsistent with the verdicts that no reasonable jury could have returned them.") (quoting Rodowicz v. Mass. Mut. Life Ins. Co., 279 F.3d 36, 41-42 (1st Cir. 2002)).

A. Unjust Enrichment Liability

With these standards in mind, we examine the jury verdict in favor of MEEI, beginning with unjust enrichment liability. In Massachusetts, a claim for unjust enrichment does not require consideration, but there must be "unjust enrichment of one party and unjust detriment to another party." MEEI-II, 412 F.3d at 234 n.7 (internal quotation marks and citations omitted); see also 26 Samuel Williston & Richard A. Lord, A Treatise on the Law of Contracts § 68:5 (4th ed. 1993) (establishing that unjust enrichment requires: (1) a benefit conferred upon the defendant by the plaintiff; (2) an appreciation or knowledge by the defendant of the benefit; and (3) acceptance or retention by the defendant of the benefit under the circumstances would be inequitable without payment for its value); Stevens v. Thacker, 550 F. Supp.2d 161, 165 (D. Mass. 2008). Massachusetts courts emphasize the primacy of equitable concerns in a finding of unjust enrichment or quasi-contract: "[C]onsiderations of equity and morality play a large part in constructing a quasi contract." Salmon v. Terra, 477 N.E.2d 1029, 1031 (Mass. 1985).

Furthermore, Massachusetts courts have recognized that misuse of confidential information may lead to unjust enrichment. Under Massachusetts law, "a constructive trust is . . . imposed to avoid unjust enrichment of one party at the expense of the other where information confidentially given or acquired was used to the advantage of the recipient at the expense of the one who disclosed the information." MEEI-II, 412 F.3d at 238 (internal quotations and citations omitted). In short, we previously have found that in order for MEEI to show unjust enrichment based on unauthorized disclosure of confidential information, MEEI had to prove that QLT used MEEI's confidential information at MEEI's expense. Id.

Against this backdrop, QLT argues that it was entitled to judgment because MEEI failed to produce proof of a legally cognizable benefit under either of its theories of unjust enrichment. QLT contends that neither its disclosure of MEEI's confidential information, nor MEEI's cooperation on the '591 application were compensable benefits as a matter of law. Consequently, QLT argues that it has not been unjustly enriched and, therefore, MEEI is due no compensation under any equitable doctrine, whether styled as unjust enrichment, quasi-contract, disgorgement, or restitution.

MEEI counters that both the disclosure of its confidential information and its assent to the '591 application

separately constituted a legally cognizable benefit to QLT for which MEEI deserves compensation. We consider each theory in turn.

1. Confidential Information

We begin by tackling QLT's challenge to the sufficiency of the evidence undergirding the confidential information theory of unjust enrichment. We then address QLT's legal challenges to this theory.

Over the course of the trial, the parties introduced copious evidence. For example, it is undisputed that QLT agreed not to disclose MEEI's confidential information "to any person or entity other than its corporate counsel and employees."¹² Nevertheless, there was evidence that QLT contacted CIBA Vision suggesting a "strategic partnership," and specifically proposed Dr. Miller's work as "an interesting possibility" that QLT and CIBA Vision should jointly pursue. Believing the use of Dr. Miller's name would bolster QLT's credibility with CIBA Vision, Dr. Ed Levy used her name in further marketing materials. And in December of 1993, without Dr. Miller's permission, Dr. Ed Levy sent CIBA Vision portions of Dr. Miller's research results -- results that QLT had

¹²QLT claims that it was not unjustly enriched because material transfer agreements gave it the right to access Dr. Miller's research. But those agreements did not give QLT the right to disclose Dr. Miller's findings, which was an essential step in the courtship of CIBA Vision. We further note that the jury was instructed regarding the material transfer agreements, and we presume that a jury understands and follows a court's instructions. United States v. Griffin, 524 F.3d 71, 78 (1st Cir. 2008).

agreed to keep confidential. The information disclosed included Dr. Miller's findings pegging the optimal irradiance level at 600 mW/cm², which formed the basis for the FDA approved irradiance level for Visudyne. When CIBA expressed an interest in collaboration, but requested additional information, QLT promised to provide it, even though it needed Dr. Miller's permission to provide such information.

QLT had an incentive to provide additional information. Although CIBA Vision had expressed an interest in QLT's BPD product, it was concurrently developing its own compound for eye treatments. It was therefore unsurprising that Dr. Ed Levy asked Dr. Miller to present her work directly to CIBA Vision in Switzerland, and offered to compensate MEEI fairly for its invention if Dr. Miller made such a presentation. Indeed, Dr. Levy confirmed his oral promise with written assurances that QLT would contact MEEI regarding a licensing agreement.

There was further evidence at trial that Dr. Miller's presentation was a salient consideration in CIBA Vision's decision to pursue its partnership with QLT. In its Letter of Understanding with QLT, CIBA Vision wrote that "Dr. J. Miller's (Harvard University) presentation has impressed and convinced us that Photodynamic Therapy will be the treatment of Age-related macular degeneration of the future." CIBA Vision went on to propose a "joint-development" of Visudyne under the CIBA-umbrella agreement.

In June 1994, QLT and CIBA executed the Letter of Intent, which suggested that CIBA's decision to partner with QLT resulted from the disclosure of MEEI's research. Even after these initial steps toward collaboration, CIBA Vision pressed QLT for additional information about MEEI's work. In June 1994, CIBA wrote that it was "essential that Dr. Miller shares all the information and statistics with us" (emphasis in original). Moreover, CIBA Vision explained that it was equally "essential" that Dr. Miller personally give a demonstration directly to CIBA Vision representatives. Faced with these requests, QLT again solicited Dr. Miller's cooperation, and once again promised to license the technology from MEEI. Dr. Miller obliged by providing additional confidential information, some of which was not included in previously published work or in her presentation to an ophthalmological conference. Moreover, the QLT-CIBA Vision partnership agreement required the disclosure of any of Dr. Miller's preclinical work not previously disclosed (a disclosure that would also have required Dr. Miller's assent). In a familiar pattern, QLT obtained Dr. Miller's cooperation with the promise of a licensing deal.

Finally, there was evidence at trial suggesting that by 1992-1993, QLT was in serious need of a financial partnership. By 1992, QLT had been in business for nearly ten years, but had failed

to post a profit. There was also evidence suggesting that QLT required additional funding for product development.

The evidence was sufficient for the jury to find that each element of unjust enrichment was satisfied. QLT promised Dr. Miller that it would pay MEEI fair compensation for the right to disclose her confidential research. QLT made similar promises to secure Dr. Miller's active cooperation at times when such cooperation was critical to the courting of CIBA Vision. This evidence supported the jury's finding that Dr. Miller's efforts constituted a benefit to QLT (which QLT sought and appreciated). The jury could rationally infer that, if QLT did not value either the ability to disclose Dr. Miller's confidential research results or the credibility that Dr. Miller (and MEEI) gave QLT in its overtures to CIBA Vision, QLT would not have made so many promises to pay fair compensation to MEEI. Accordingly, the jury concluded that QLT obtained a significant benefit from the early disclosure of Dr. Miller's confidential information and from Dr. Miller's active involvement in the courtship of CIBA Vision, without which QLT's collaboration with CIBA Vision may not have borne fruit. Finally, the evidence permitted a finding that the benefit and detriment were incurred in a context in which MEEI expected compensation.

Despite QLT's arguments to the contrary, we find no legal impediment to this conclusion. See 41 C.J.S. Implied Contracts §

9 ("A 'benefit' for purposes of an unjust enrichment claim is any form of advantage that has a measurable value, including the advantage of being saved from an expense or loss."); Asigard v. Bray, 419 N.E.2d 315, 318 (Mass. App. Ct. 1981) (finding the conferral of a benefit (and ultimately unjust enrichment) where plaintiff contributed substantially to a venture and, after inconclusive contract negotiations, defendants used plaintiff's contributions without compensation); see also Mass. v. Mylan Lab., 347 F. Supp.2d 314, 323-24 (D. Mass. 2005) (noting that inflation of average drug wholesale price may constitute benefit where such inflation resulted in higher payments from other providers). Moreover, given Dr. Miller's repeated requests for compensation and QLT's repeated assurances that it would pay such compensation in the form of a licensing agreement, we see little reason to disturb the jury's conclusion that QLT's retention of the benefits it received would be unjust under the circumstances.

QLT argues that the evidence adduced at trial was legally insufficient to permit the jury to find any causal relationship between the disclosure of confidential information and QLT's eventual Visudyne sales. To support this proposition, QLT primarily relies on Demoulas v. Demoulas Super Mkts., 667 N.E.2d 159, 196 (Mass. 1997). That case is inapposite.¹³ Demoulas

¹³QLT also suggests that the jury's finding that the disclosure of confidential MEEI information was a causal factor in the QLT-CIBA partnership runs afoul of the holding in Hartford Cas. Ins. Co. v.

involved the usurpation of corporate opportunities, breach of fiduciary duty, and restitution. The court held as a matter of law that one who is unjustly enriched due to the diversion of corporate opportunities and/or the breach of a fiduciary duty is entitled to a credit for amounts that she personally invests. Id. at 195. The court explained that

[t]he purpose of this credit is to prevent an injured plaintiff from receiving more than the amount by which the defendant has benefitted from the wrongful transaction. Determining the amounts to be credited . . . is a factual issue . . . The burden of proof is on the defendants to show how much of any entity's assets are not the direct or indirect results of the violations of fiduciary duty.

Id. at 196. (citation omitted, emphasis added). Thus, the most that Demoulas can stand for here is that QLT should have had the opportunity to prove that its Visudyne profits did not derive entirely or even partially from the disclosure of MEEI's confidential information. QLT presented a vigorous defense.

New Hampshire Ins. Co., 628 N.E.2d 14, 20 (Mass. 1994), but this claim is equally unavailing. In Hartford, the plaintiff urged rejection of a trial court's finding that there was no evidence that an insurance company's arguably negligent investigation resulted in the insurance company's failure to settle a claim, thereby causing liability for an excess insurer. Id.

In the present case, as described above, there was evidence that CIBA Vision considered the prompt disclosure of all of Dr. Miller's research, and indeed her personal participation "essential." Similarly, there was evidence that QLT was in relatively difficult financial circumstances. The jury was entitled from these facts to infer that disclosure of Dr. Miller's confidential information was a causal factor in the QLT-CIBA venture.

During the course of this defense, QLT's position was that its partnership with CIBA Vision was not dependent on the disclosure of MEEI's confidential information. QLT further urged that it was entitled to a Demoulas-type credit through its damages expert. As we explore in our later discussion of damages, the jury and the trial court rejected QLT's first argument but partially credited the second; the jury awarded MEEI only a portion of the damages that it sought, properly leaving the remainder of the profits for QLT. Demoulas does not require a contrary result.

QLT's remaining arguments that it was not unjustly enriched are equally unavailing. First, QLT argues that MEEI was not entitled to prevail on a theory of unjust enrichment based on the disclosure of confidential information because the trial court granted QLT judgment as a matter of law with respect to MEEI's related trade secrets claim.¹⁴ The trial court granted judgment to QLT on the trade secret claim because (1) MEEI failed to identify specific trade secrets and prove that QLT's disclosure of such secrets directly resulted in commercial advantage, (2) MEEI did not demonstrate that any of its trade secrets were actually incorporated into Visudyne, and (3) that to the extent any trade secrets were used in Visudyne or to entice CIBA Vision, Dr. Miller

¹⁴MEEI cross appeals from this order. But in light of our conclusion that MEEI is entitled to judgment on its unjust enrichment and Chapter 93A claims, this aspect of MEEI's cross-appeal is moot.

voluntarily disclosed them in advance of the launch of Visudyne. MEEI-III, 495 F. Supp.2d at 211. QLT argues that MEEI's unjust enrichment claim suffers from the same infirmities, so that to the extent that it relies on disclosure of confidential information, the unjust enrichment claim must also fall.¹⁵

In rejecting this argument, the trial court relied on long-standing Massachusetts case law differentiating between an action for the misappropriation of trade secrets and one for unjust enrichment based on the improper use of confidential information. Id. Based on this distinction, the trial court found that although the evidence was insufficient to support a claim for misappropriation of trade secrets, the evidence was sufficient to support a finding of unjust enrichment based on the improper use of confidential information. Id. ("The misappropriation of trade secrets claim . . . required MEEI to show that it had taken steps to keep secret confidential information and that QLT had breached its duty not to disclose that information By contrast, unjust enrichment requires MEEI to show only that QLT used MEEI's confidential information at MEEI's expense.") (citations omitted).

QLT argues that the trial court drew an impermissible distinction between these claims. We disagree. In our prior opinion, as QLT points out, we recognized a limited linkage between

¹⁵We address QLT's argument that the trial court actually excised this unjust enrichment claim from the case in II. D, infra.

the trade-secret claim and the confidential information theory of unjust enrichment. See MEEI-II, 412 F.3d at 238. What QLT overlooks is that we specifically held that, although MEEI could not recover separately under each theory, it "should have the opportunity to prove the distinct elements of its unjust enrichment and trade secrets claims." Id. at 238 n.13 (emphasis added). Massachusetts law provides two distinct theories of recovery based on the improper use of confidential information: misappropriation of trade secrets and unjust enrichment. Compare Jet Spray Cooler, Inc. v. Crampton, 282 N.E.2d 921 (Mass. 1972) (requiring proof of "proper and reasonable" steps to protect secrecy of information and proof with particularity of trade secrets used by defendants), with USM Corp. v. Marson Fastener Corp., 393 N.E.2d 895, 903 (Mass. 1979) (noting that confidential business information not rising to the level of trade secret is nevertheless entitled to protection); Barry v. Covitch, 124 N.E.2d. 921, 924 (Mass. 1955) (noting that constructive trust is available to prevent unjust enrichment based on wrongful use of information confidentially given), and Warsofsky v. Sherman, 93 N.E.2d 612, 616 (Mass. 1950) (finding information regarding proposed re-purchase of assets given to bank officer was confidential information and imposing equitable relief where bank officer misused such information).¹⁶ The fact that in our prior

¹⁶A finding that disclosure of confidential information can be used to support a claim for unjust enrichment even when such information does not constitute a trade secret is hardly anomalous. We have

decision we framed our analysis of a statute of limitations defense by using a single factual summary for both claims, see MEEI-II, 412 F.3d at 238, obviously does not change this bedrock principle of Massachusetts law. Thus, the entry of judgment with respect to the trade secrets claim did not legally compel the same result with respect to the unjust enrichment claim.

Finally, QLT argues that there was insufficient evidence to support unjust enrichment based on use of confidential information because the information at issue was not confidential. QLT advances this claim by noting (1) the publication of some of Dr. Miller's work on March 15, 1994, and (2) her subsequent presentation to an ophthalmological conference. There was evidence that both QLT and CIBA were aware of the imminent public disclosure of Dr. Miller's work. Despite this knowledge, CIBA felt that expeditious access to all of Dr. Miller's work (including research that was scheduled for publication and material that was not slated for disclosure) was "essential." Similarly, the jury could have found that QLT saw value in acceding to CIBA's demands for information while it was still competing with CIBA's internally developed BPD compound. Based on this and other evidence, the jury reasonably could have concluded that much of the information shared

previously approved such a result under a different state's law. See APG, Inc. v. MCI Telecom. Corp., 436 F.3d 294, 307 (1st Cir. 2006) (applying Rhode Island Law) (finding use of confidential information was not a trade secret as a matter of law, but could be used to support unjust enrichment claim).

with CIBA Vision was confidential because it was disclosed before publication, and that this prompt disclosure was valuable to QLT despite the imminent publication of many aspects of this research.¹⁷ Accordingly the jury could find that QLT was unjustly enriched when it did not pay any compensation for the disclosure of Dr. Miller's confidential research and her cooperation in the courtship of CIBA Vision.

2. Patent Application/Inventorship Dispute

QLT also challenges the jury's finding of unjust enrichment based on the patent application theory. QLT's primary quarrel with this theory relates to its legal underpinnings. We considered and rejected most of these arguments in our prior opinion, and QLT's new arguments fare no better.

The patent application theory centers on the joinder of the MEEI-only '473 patent application with the combined '591 application. MEEI claimed that QLT, by promising compensation commensurate with sole-ownership, induced MEEI's cession of the '473 application, in which its researchers were the only listed co-inventors, in favor of the '591 application, which included co-

¹⁷QLT's argument that information disclosed subsequent to the publication and conference was valueless is a difficult one to make, in view of the fact that QLT made repeated offers of compensation to obtain such information. Although those promises are not enforceable, the very fact that the promises were made is demonstrative of the value that QLT placed on receiving Dr. Miller's cooperation in disclosing this additional information.

inventors from MGH and QLT. At its heart, this claim represents a straightforward request for compensation for a benefit conferred and appreciated in a non-gratuitous context. But the benefit at issue in this case falls near the penumbra of federal patent law. Consequently, the parties have partially succumbed to the gravitational pull of patent law and have raised several arguments that directly implicate patent law. As a consequence, we review at the outset those issues that we left open in our prior opinion and which were therefore available for exploration at trial. Doing so will serve to sharpen our focus on the parties' contentions deserving closer attention.

We previously noted that although the proper inventorship of the patent applications at issue is a non-negotiable question of federal patent law, the question of which application to prosecute was a choice available to the parties. MEEI-II, 412 F.3d at 232. Consequently, we explained that if QLT induced MEEI to abandon a more limited claim (embodied in the '473 application or a similar MEEI-only application that did not raise prior art issues) in favor of the broader '591 claim by promising compensation, and then did not pay such compensation, QLT would be unjustly enriched. Id. at 234 n.7. In reaching this conclusion, we explicitly rejected QLT's invitation to find that it had not been enriched because MEEI retained the right to obtain (and in fact did obtain) an MEEI-only patent in its own name. Id. Rather we emphasized that the proper

inquiry was whether, as a result of unjust conduct (i.e., making a promise and then failing to keep it), QLT retained royalties that it would have had to forgo had it not committed such unjust conduct.¹⁸ Id.

The parties have vigorously disagreed as to how to interpret our mandate. The trial court found that MEEI had to prove two key points: (1) the existence of an agreement whereby MEEI would abandon prosecution of the '473 application in exchange for fair compensation; and (2) that QLT's failure to honor this agreement resulted in unjust enrichment. QLT objects to this framework.

Instead, QLT strenuously argues that our prior decision and other precedent required MEEI to prove that it specifically conferred a patent benefit. The authority that QLT advances to support this proposition is Incase, Inc. v. Timex, Corp., 488 F.3d 46 (1st Cir. 2007). Incase, however, merely held that a party claiming unjust enrichment in Massachusetts must present evidence as to the amount of the unjust enrichment. Id. at 54-55.¹⁹ We did

¹⁸We note that in our prior decision, we opined that should MEEI prove such allegations, "the elements of a quasi-contract claim might be established." Although we used the word "might," without any explanation, we believe the parties and the trial court had no choice but to proceed on the assumption that upon proof of the elements we described, the elements of a quasi contract claim would be established.

¹⁹We take up the question of valuing any benefit conferred and the teachings of Incase with respect to this question infra.

not there state that some benefits were compensable and others were not. Rather, Incase largely involved consideration of the proof of the amount of unjust enrichment, without commenting on the nature of the benefit supporting a claim. Indeed, the fact that a patent application is the breeding ground of an unjust enrichment claim, such as the present one, does not require proof of a patent benefit. See Thompson v. Microsoft, Corp., 471 F.3d 1288, 1291-92 (Fed. Cir. 2006) (finding that state law claim of unjust enrichment did not present a question of patent law).²⁰ Accordingly, we reject QLT's contention that MEEI was required to prove a patent benefit.

QLT's next prong of attack relies on the fact that the summary judgment posture of our prior decision obliged us to assume that both the '473 and '591 applications were valid. MEEI-II, 412 F.3d at 233 n.5. QLT argues that after a trial on the merits, this presumption should fall away. Additionally, QLT argues that the

²⁰Indeed, another claim that QLT has pressed is the question of preemption. We disposed of this claim in our prior decision, holding under the conflict preemption standard, that 35 U.S.C. § 262 permits suits like the present one. MEEI-II, 412 F.3d at 234-35. We reached this conclusion because we determined that the preemption exception in § 262 was not limited to written, legally enforceable contracts. Id. Rather, we concluded that Congress intended § 262 to reach non-written agreements, and remanded for a factual determination as to whether such an agreement was present in the present case. Id. at 235. We note that our holding was consistent with the Federal Circuit's decision in Thompson. 471 F.3d at 1291-92. The trial court's resolution of this issue was therefore proper.

evidence at trial cannot support a conclusion that any MEEI-only patent was in fact valid.

Even if QLT's position potentially has merit, it is beside the point. The central thrust of our prior decision was that it was possible that QLT benefitted from MEEI's assent to the amendment of the '473 application regardless of the validity of any MEEI-only application. The trial court found that MEEI had presented "overwhelming evidence that MEEI agreed to drop prosecution of the '473 application in exchange for fair compensation." MEEI-III, 495 F. Supp.2d at 213. The jury and the trial court credited the evidence that QLT initially softened its position regarding inventorship and eventually agreed to compensate MEEI for its consent to broaden the patent application. See id. at 214. We see no reason to disturb these findings.

Moreover, QLT misses the legal significance of these findings. MEEI's cooperation in the patent application provided an important benefit at a vital time. Without MEEI's consent to the broadened '591 application, QLT would have faced significant challenges regarding its ownership of essential rights at a time when its relationship with CIBA was in its nascent stages.²¹ Had

²¹In arguing that MEEI's confidential information did not substantially assist it in its courtship of CIBA, one of QLT's arguments was that the relationship had not been finalized until later. To our minds, for the reasons described supra, the confidential information was an important element in the courtship. But QLT's concession only substantiates an inference that demonstrating control over its intellectual property portfolio was

MEEI declined to consent to the co-mingling of claims 7 and 14 of the '591 application, QLT and/or MGH would have had to engage in elaborate and lengthy proceedings to establish their co-inventorship rights, if in fact they had rights that could be vindicated. To challenge inventorship without MEEI's consent, QLT would have had to file its own, separate patent application covering the same claims, which would result in the Patent and Trademark Office declaring and adjudicating an interference proceeding, or issuing a separate patent. See Sagoma Plastics, Inc. v. Gelardi, 366 F. Supp.2d 185, 188 & n.1 (D. Me. 2005) (noting that 35 U.S.C. § 116 permits the Patent and Trademark Office to correct inventorship in a patent application only with the consent of all parties) (citing 37 C.F.R. § 1.48); 35 U.S.C. § 256 (permitting the Patent and Trademark Office to correct inventorship of an issued patent with the consent of all parties); 35 U.S.C. § 135 (describing interference proceedings). Had QLT provoked an interference, as the junior applicant, it would have borne the burden of proving that its claimed inventors met the standard of inventorship (or its earlier invention of the patent) by a preponderance of the evidence. See Environ Products, Inc. v. Furon, Co., 215 F.3d 1261, 1265 (Fed. Cir. 2000).

an important requirement in finalizing QLT's relationship with CIBA.

Alternatively, QLT could have waited until MEEI's patent issued, and pursued a legal challenge against the patent in an infringement suit, or pursuant to 35 U.S.C. § 256, which permits the courts to hear actions for correction of inventorship. See, e.g., Eli Lilly & Co. v. Aradigm Corp., 376 F.3d 1352, 1356 n.1, (Fed. Cir. 2004) (noting that § 256 creates a cause of action to correct inventorship). But if QLT had proceeded along this path, it would have faced the decidedly difficult challenge of proving non-joinder of inventors by clear and convincing evidence. Id. at 1364-65 (citing Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 980 (Fed. Cir. 1997)).

Thus, MEEI's joinder of its claims into a single patent application spared QLT what would have, or at least could have, otherwise been an arduous task of seeking the joinder of its favored inventors. This was a cognizable benefit, and we see no reason why QLT should be able to avoid paying compensation for this benefit. In fact, even QLT recognized that this was a valuable benefit. QLT's patent attorney advised QLT that MEEI could "unilaterally file a divisional application [from the joint '591 application] based on the parent or (CIP) containing claims to neovasculature and naming MEEI inventors." A finder of fact could conclude that this was undoubtedly one more reason that QLT postponed discussion of licensing and avoided "getting into a pissing match" with Dr. Miller.

Moreover, given the fact that QLT's relationship with CIBA Vision was in its nascent stages and the fact that Visudyne's potential in the marketplace was subject to great uncertainty, the patent application benefit could likely support a substantial valuation. In fact, the jury and the trial court appear to have credited QLT's promises to compensate MEEI as though it was the sole inventor of the claims at issue. In light of the foregoing, we believe QLT may have used more business sense in making this offer than the trial court has suggested. See MEEI-III, 495 F. Supp.2d at 214. Ultimately, however, the wisdom of QLT's promises is also beside the point; there was sufficient evidence that MEEI's cooperation in the patent application process constituted a detriment to MEEI and conferred a benefit on QLT in a non-gratuitous context. In light of QLT's vast profits and repeated promises, it would be manifestly unjust to permit QLT to retain such benefits.

Against this backdrop, QLT's remaining challenges to the finding of a patent benefit are easily dismissed. Since QLT received a benefit immediately upon the broadening of the patent application, we need not analyze the impact of MEEI's later patent application or its conferral of any patent benefits during the trial. Similarly, since QLT had already benefitted from the broadening of the patent application, we need not join the parties' vigorous debate as to whether QLT actually received freedom from a

blocking patent.²² The only matter remaining in the unjust enrichment claim is the propriety of the damage award.

B. Unjust Enrichment Damages

The parties agree that a royalty rate based on the net sales of Visudyne is the appropriate measure of QLT's unjust enrichment. MEEI-III, 495 F. Supp.2d at 216. Unfortunately, the parties agree on little else. Consequently, we return to the basics of unjust enrichment.

In this case, the appropriate measure of damages should be an approximation of the value of the benefit MEEI conferred on QLT. Such an approach is in harmony with our prior decision, see MEEI-II, 412 F.3d at 234, and Massachusetts case law, see J.A. Sullivan Corp. v. Massachusetts, 494 N.E.2d 374, 379 (Mass. 1986); see also Fox v. F & J Gattozzi Corp., 672 N.E.2d 547, 552 (Mass. App. Ct. 1996) (quoting Restatement of Restitution § 1 (1937)). When a defendant has received a benefit that is significantly greater than the plaintiff's loss and justice so requires, "the defendant may be under a duty to give the plaintiff the amount by

²²At trial and in its briefs to this court, QLT made much of the fact that MEEI retained its right to pursue a patent infringement claim based on the '303 patent. Although MEEI did retain this patent right, it does not follow that QLT realized a benefit only after MEEI ceded those rights at the district court's urging. The mid-trial cession of patent rights ensured that MEEI would not enjoy a double recovery. But MEEI did in fact confer a patent-related benefit on QLT in 1994-95, and has every right to recover for the full value of that benefit.

which he has been enriched." Restatement of Restitution § 1 cmt. e. The passage of time has not dulled this conception; the tentative draft of the Restatement (Third) of Restitution advocates the same result: a party's recovery based on an indefinite agreement is "measured solely by the value of the claimant's performance to the defendant." Restatement (Third) of Restitution and Unjust Enrichment § 31 cmt. h (T.D. No. 3, 2004).

QLT argues that MEEI failed to prove such damages and consequently QLT should be entitled to a judgment. QLT primarily relies on Incase to support this position. 488 F.3d at 54-55. In Incase, the plaintiff claimed that the defendant was unjustly enriched when it commissioned the plaintiff to design watch displays with removable flags (for which plaintiff did not charge separately) on the understanding that the defendant would then purchase the design from plaintiff. The defendant instead contracted with a foreign firm to produce plaintiff's design. Id. at 55. To prove unjust enrichment, the plaintiff introduced evidence of the amount of profits it would have earned had the defendant purchased the designed product from plaintiff. Id. Giving credit to this evidence, the jury awarded damages in that amount.

On appeal, we reviewed Massachusetts case law on the measure of unjust enrichment damages -- a body of law that is equally applicable to the present case. We begin with the basic

proposition that the determination of the value of the benefit conferred on the defendant is a question of fact. Id. at 54 (quoting Guenard v. Burke, 443 N.E.2d 892, 896 (Mass. 1983)). Moreover, Massachusetts has made clear that a jury's unjust enrichment award "need not be susceptible of calculation with mathematical exactness, provided there is a sufficient foundation for a rational conclusion." Lowrie v. Castle, 113 N.E. 206, 210 (Mass. 1916); see also Kitner v. CTW Transp., Inc., 762 N.E.2d 867, 873 (Mass. App. Ct. 2002). In a case where the jury cannot estimate the value of a benefit from common knowledge, the plaintiff must present evidence of the reasonable value of the benefit in order to receive anything more than nominal damages. Incase, 488 F.3d at 54 (citing Hurwitz v. Parkway Country Club, Inc., 180 N.E.2d 94, 97 (Mass. 1962)). Finally, we note here, as we did in Incase, that unjust enrichment damages "may not be based only upon [the plaintiff's] lost profits." Id. at 46 (citing J.A. Sullivan Corp., 494 N.E.2d at 379). After reviewing this case law, in Incase, we found the plaintiff's sole reliance on evidence of his own lost profits insufficient to sustain a claim for unjust enrichment damages. Id. at 55 ("Instead of presenting evidence of the value of its labor and materials and other costs . . . or of the value of the benefit conferred to Timex . . . Incase presented evidence only of the profit it would have had.").

Withal, it is important to note the questions left open in Incase. We made clear that a plaintiff may not recover her own lost profits through an unjust enrichment claim, but we did not determine whether unjust enrichment doctrine could force the defendant to disgorge any profit it made as the result of unjust or wrongful conduct. Thus, Incase could not recover its 6.9 cent per unit profit margin in an unjust enrichment action. Id. at 54-55. But we did not decide whether Incase could have forced Timex to disgorge the profits Timex earned as the result of its actions. Indeed, we could not have reached such a conclusion because Incase failed to provide evidence of the value of any benefit to Timex, much less the extent to which Timex profited as the result of its unjust conduct.

Courts that have considered the issue have permitted disgorgement of the malefactor's profits as a remedy for unjust enrichment in patent disputes. See, e.g., Univ. of Colo. Found., Inc. v. Am. Cyanamid Co., 342 F.3d 1298, 1311-13 (Fed. Cir. 2003) (applying Colorado law).²³ Although Massachusetts courts have not squarely considered the availability of profit disgorgement in an unjust enrichment action, we think it likely that they would approve of a disgorgement remedy in the present unjust enrichment

²³Professor Laycock, the reporter for the aborted Restatement (Second) of Restitution, has identified a trend among courts to permit disgorgement of profits in unjust enrichment cases. See Douglas Laycock, The Scope and Significance of Restitution, 67 Tex. L. Rev. 1277, 1288-89 (1989).

context. See Demoulas, 677 N.E.2d at 196 (noting that disgorgement is necessary to prevent unjust enrichment in breach of fiduciary duty context).

With this case law in mind, we evaluate the jury's damage award. The jury heard all of the evidence supporting the conferral of both the confidential information and the patent application benefits. In addition, each side presented damages experts to help the jury understand how to express the benefits conferred as an ongoing royalty. MEEI's expert provided important background evidence showing reasonable royalties in the pharmaceutical industry, and further described other QLT and Novartis licenses to give the jury a background as to the outer limits of a license that MEEI could have negotiated from QLT.²⁴ In addition, MEEI's damages expert testified that a reasonable royalty could be as high as 13.5%, which would constitute approximately 50% of QLT's net profits from the sale of Visudyne. In reaching this conclusion, the expert explained that he discounted QLT's royalty agreement with MGH because it had a "most favored nation" clause and because he understood MEEI to have conferred a larger benefit to QLT than MGH.²⁵

²⁴MEEI's damages expert noted that QLT had negotiated licenses with royalty rates of as high as 15-22% of net sales, and that CIBA had negotiated licenses with royalties as high as 25% of net sales.

²⁵The latter assumption is amply supported in the record: QLT's patent attorney herself wrote that "[a]lthough the MGH inventors are properly included, one could argue that the contributions to

QLT also presented evidence from its own damages expert. QLT's expert attempted to discredit the surveys upon which MEEI's expert relied. Similarly, QLT's expert opined that a fair royalty to MEEI could not exceed the royalty paid for the use of BPD, which was 2%. Furthermore, QLT's expert posited that the jury should consider the fact that Dr. Julia Levy was a co-inventor and had the right to practice the invention independently. QLT's expert therefore believed that QLT did not have to pay any royalties, and in these circumstances, the 0.5% royalty offered to MGH constituted a royalty that was not only fair, but munificent.

From this competing testimony, the jury had enough information to establish an approximate valuation of the benefit MEEI conferred on QLT. The damages experts ensured that the jury engaged in an effort to determine a reasonable approximation of the value of the benefits MEEI conferred on QLT. It is true that MEEI's expert referred to QLT's profits from the sale of Visudyne, but this was in no way inconsistent with our holding in Incuse. After all, QLT's profits served as a reasonable approximation of the value of the benefit conferred at a particularly critical time in the life cycle of a nascent biotechnology company with a product (BPD) in search of an application. We further note -- as the parties agreed at trial -- that royalty rates based on sales are

the invention are uneven. I actually think that is true." She then proposed offering MEEI a higher royalty rate than MGH.

the preferred method to express the value conferred in the pharmaceutical context.²⁶ Given these considerations, we cannot conclude that the damages evidence was insufficient as a matter of law to permit a reasonable approximation of the value of the benefit conferred on QLT.

Nor do we fault the amount of the award. The jury grappled with highly complex, voluminous evidence and reached a reasonable conclusion. It rejected MEEI's out-sized valuation of its own contributions to Visudyne, while simultaneously rejecting QLT's cramped view. The trial court agreed, noting that it would have awarded a slightly higher royalty rate, but also noting its belief that the jury's rate was within the realm of reasonability. MEEI-III, 495 F. Supp.2d at 217-18. We see no reason to disturb the jury's findings.

QLT raises a number of other challenges to the damage award, which we now address. First, QLT argues that the scope of the royalty should have been limited to the U.S. and Canada. But because we have concluded that MEEI proved its unjust enrichment

²⁶The fair market value of a requested benefit is a well accepted measure of unjust enrichment. See, e.g., Dines v. Liberty Mut. Ins. Co., 448 N.E.2d 1268, 1271 (Mass. App. Ct. 1990) (citing 1 Corbin, Contracts § 19A at 53 (Supp. 1989); Hill v. Waxberg, 237 F.3d 936, 939-40 (9th Cir. 1956)); Restatement (Third) of Restitution and Unjust Enrichment, § 31 cmt. h (Tentative Draft 3, 2004) ("Where the parties' contract does not directly fix the rate of compensation recovery under this Section follows the familiar rule by which a requested performance is ordinarily deemed to yield a benefit to the defendant equivalent to its market value.").

claim under a confidential information theory, QLT's objections lack force. Similarly, because we have determined that there was sufficient evidence that QLT acquired benefits as early as the spring of 1994, QLT's complaints about the timing of the accrual of the obligation to pay also lack force.

C. The Chapter 93A Claim

Having found that MEEI properly proved unjust enrichment, we turn to the question of liability under the Massachusetts unfair and deceptive trade practices statute. A covered party is liable under this statute if it engages in any "unfair or deceptive act or practice." Mass. Gen. Laws. c. 93A §§ 2, 11. To prove such a claim, it is neither necessary nor sufficient that a particular act or practice violate common or statutory law. Kattar v. Demoulas, 739 N.E.2d 246, 257 (Mass. 2000) (to violate Chapter 93A, acts needn't violate common law or statutory law); see also Renovators Supply Inc. v. Sovereign Bank, 892 N.E.2d 777, 787 (Mass. App. Ct. 2008) (common law wrong does not automatically amount to a violation of Chapter 93A). Because "[t]here is no limit to human inventiveness in this field," Massachusetts courts evaluate unfair and deceptive trade practice claims based on the circumstances of each case. Kattar, 739 N.E.2d at 257 (citations omitted). In so doing, Massachusetts leaves the determination of what constitutes an unfair trade practice to the finder of fact, subject to the court's performance of a legal gate-keeping function. Milliken &

Co. v. Duro Textiles, LLC, 887 N.E.2d 244, 259 (Mass. 2008). As is true in other jurisdictions, Massachusetts courts, in considering whether a particular act or practice violates the unfairness prong of Chapter 93A: "look to (1) whether the practice . . . is within at least the penumbra of some common-law, statutory or other established concept of unfairness; (2) whether it is immoral, unethical, oppressive, or unscrupulous; [and] (3) whether it causes substantial injury to consumers (or competitors or other businessmen)." MEEI-II, 412 F.3d at 243 (quoting PMP Assocs., Inc. v. Globe Newspaper Co., 312 N.E.2d 915, 917 (Mass. 1975)).

Against this backdrop, we briefly review the relevant facts. QLT drew from MEEI all of its bargaining leverage in the form of, inter alia, its confidential information and its cooperation in the patent application. Having obtained all of MEEI's chips, QLT refused to tender compensation commensurate with its prior representations. These MEEI concessions were invaluable to QLT because they were made at a time when QLT was actively courting CIBA, and CIBA placed a high value on them.

We already have described the manifest unfairness of QLT's actions in great detail, and there is no need to replough that ground. Suffice it to say that under the circumstances, QLT's initial position that it did not have to pay a royalty to MEEI was obviously unfair and unscrupulous (or, at least, a reasonable fact finder could so conclude). After all, QLT was able to take such a

position only because MEEI agreed to join the '591 application. It is worth noting that QLT's own patent attorney asserted that QLT's initial royalty payment figures were unfair. We agree with the trial court that the combination of extracting highly valuable leverage (in a misleading manner) and then avoiding payment in accordance with prior promises was unscrupulous and dishonest. Thus, not only was QLT's conduct within the penumbra of common-law unjust enrichment, but it was also oppressive and unfair within the meaning of Chapter 93A. Consequently, the facts found by the jury and the trial court state a claim for relief that is cognizable under the statute.

Nevertheless, QLT asserts that the imposition of Chapter 93A liability is unwarranted, contending that Massachusetts courts have held that Chapter 93A does not regulate, and therefore cannot punish, most instances of incomplete or imperfect contract negotiations. See, e.g., Lambert v. Fleet Nat'l Bank, 865 N.E.2d 1091, 1098 (Mass. 2007).²⁷ Consequently, QLT argues that "[e]very deal that goes sour does not give rise to a c. 93A claim." Id. (quoting Pappas Indus. Parks, Inc. v. Psarros, 511 N.E.2d 621, 623 (Mass. App. Ct. 1987)).

²⁷The Lambert court concluded that the Chapter 93A claim at issue in that case was barred on limitations grounds. Lambert, 865 N.E.2d at 1097. The remainder of the opinion therefore is not essential to the holding, and although we consider it, we note that it is not binding.

Other Massachusetts cases, however, recognize a need to police negotiations -- even those among relatively sophisticated parties -- to ensure that they are not unfair or deceptive. Indeed, the court in Lambert reaffirmed Greenstein v. Flatley, which held that "stringing along" a counterparty to induce detrimental reliance can constitute a Chapter 93A violation. Lambert, 865 N.E.2d at 1098 (citing Greenstein v. Flatley, 474 N.E.2d 1130, 1133 (Mass App. Ct. 1985)). It is a legitimate point of inquiry whether the present case more closely resembles those cases in which Massachusetts courts would leave the parties to the rough and tumble of the marketplace, or whether the present dispute carries the indicia of detrimental reliance that would lead Massachusetts courts to invoke Chapter 93A.

In Lambert, the court found that the imposition of Chapter 93A liability was inappropriate when a bank failed to renew a loan, despite ambiguous oral assurances that the bank would "roll over" the loan in due course. Id. at 1094-95. In declining to ascribe liability, the court emphasized the ephemeral, non-specific nature of a bank officer's isolated promise of "cooperation" in the roll-over of a delinquent loan of over \$500,000 in exchange for the plaintiff's forbearance of a (potentially dubious) claim worth approximately \$28,000. Id. at 1097 & n.9. By contrast, here, QLT made repeated promises of fair compensation, and even specified that it intended to compensate MEEI as if it were the sole inventor

on claims 7 and 14. Moreover, unlike the bank in Lambert, QLT extracted considerable value in exchange for its promises to MEEI.²⁸

This case is more like Greenstein. In that case, the plaintiff submitted a signed, written lease agreement to the defendant, and in reliance on repeated assurances that only a bureaucratic formality remained for their agreement to take effect, they terminated their own lease and made arrangements to customize their space. Greenstein, 474 N.E.2d at 1132, 1134. But when the defendant landlord had the opportunity to strike a more advantageous bargain with different tenants, he did so, leaving the plaintiff without space on short notice. Id. at 1132. Despite the sophistication of the plaintiff (an accounting firm), the court found the case cognizable under Chapter 93A. In at least one pertinent way, QLT's conduct was more egregious than that of the Greenstein defendant: here, without the benefits it extracted from MEEI, QLT either would not have had a successful product, or would have had to expend considerably greater sweat and treasure to bring Visudyne to market. Consequently, we conclude that the imposition of Chapter 93A liability in the present case fits comfortably

²⁸The present case is significantly more egregious than Parks, Inc. v. Psarros, 511 N.E.2d 621 (Mass App. Ct. 1987), another case cited by QLT. In Parks, the court found no breach of contract and no 93A liability where the parties had expressed a general intent to engage in a tax-free trade of land. Id. at 622. Furthermore, in Parks, the plaintiff had not in fact taken material steps in reliance of a supposed agreement. Id. at 623. This is far removed from the case at hand.

within the Greenstein framework.

Having determined that Chapter 93A liability properly attaches to the present case, we address two questions regarding the scope of such liability. First, QLT argues that Chapter 93A cannot support liability for foreign royalties. In making this argument, QLT asserts that in its Chapter 93A discussion, the district court relied solely on the patent negotiations. We do not agree with either the argument or the assertion. The trial court explicitly mentioned Dr. Miller's presentation to CIBA as an example of MEEI's powerful bargaining position. MEEI-III, 495 F. Supp.2d at 215. Thus, for the reasons described above, the confidential information theory of unjust enrichment supports Chapter 93A liability. It follows that the trial court correctly concluded that this liability was global in scope.²⁹

At this point, we pause to consider MEEI's cross-appeal challenge to the jury's finding that QLT's Chapter 93A violation was not knowing and willful (and, therefore, that MEEI was not entitled to punitive damages). Although the jury found that QLT's conduct violated the norms of even aggressive negotiation, its rejection of punitive damages was nevertheless supportable.

Massachusetts courts have not precisely defined what

²⁹The parties also trade jousts as to whether a 1998 patent licensing proposal precludes the award of worldwide Chapter 93A damages. But the 1998 licensing proposal was not accepted; thus it could not preclude the possibility of foreign royalties.

constitutes a knowing and willful violation of Chapter 93A. But such violations usually embody outrageous conduct, often involving (1) coercion or extortion, or (2) fraud or similar forms of misrepresentations. See, e.g., Incase, 488 F.3d at 58 (citing cases). On this standard, we cannot say that an award of punitive damages was required in the present case. Given the fact that QLT agreed to negotiate and eventually offered MEEI a running royalty, a reasonable fact finder might think that QLT's conduct, though unscrupulous, did not sink to the level of a knowing and willful violation.

D. QLT's Objections to the Conduct of the Trial

We turn now to the next group of QLT's objections, all of which claim prejudicial error in the conduct of the trial. We evaluate each in turn.

First, QLT asserts procedural defects in the misuse of confidential information theory of unjust enrichment. QLT argues that it was under the impression that the trial court disposed of this theory at the close of MEEI's evidence when it granted judgment as a matter of law to QLT, pursuant to Rule 50(a), with respect to MEEI's misappropriation of trade secrets claim, only to find the theory revived in the trial court's post-trial opinion.

Consequently, QLT argues that it was precluded from presenting evidence relating to this theory, warranting a new trial.

In its ruling on QLT's post-trial Rule 50(b) motion, the trial court, relying on our previous ruling, noted that Massachusetts law treats unjust enrichment through the misuse of confidential information differently from claims of misappropriation of trade secrets. MEEI-III, 495 F. Supp.2d at 210-11. Therefore, the trial court explained that it always understood that its grant of judgment as a matter of law on the trade secrets claim left the confidential information claim undisturbed.

We agree with the trial court's assessment of events, and conclude that the court's Rule 50(a) ruling was clear enough to put QLT on notice that the confidential information claim was not dismissed. We begin with the basic principle that the purpose of a Rule 50 motion to dispose of claims or issues, not legal theories. See Hammong v. T.J. Little & Co., 82 F.3d 1166, 1172 (1st Cir. 1996). This basic norm should have put QLT on notice that in conformity with the general principle, the trial court's Rule 50(a) decision on one legal claim did nothing to disturb separate legal claims that relied on similar evidence. In the present case, the trial court made clear that it was granting judgment with respect to the trade secrets claim. And after explaining its four separate and independent rationales for doing

so, the trial court immediately noted that the Chapter 93A claim "insofar as it depends upon an alleged misappropriation of trade secret[s] fails."

This statement is instructive because it demonstrates that, in addition to excising the trade secret claim from the case, the trial court was willing and able to limit the manner in which the parties could pursue other claims. The trial court's failure similarly to limit the unjust enrichment claim should have put QLT on notice that this claim survived. In addition, the fact that MEEI requested a jury instruction regarding confidential information enhanced QLT's notice. Finally, the fact that QLT requested instructions limiting MEEI's theory of unjust enrichment to the patent benefit theory suggests that QLT was aware that the confidential information theory remained alive and well.

In these circumstances, we cannot credit QLT's ipse dixit that it was precluded from offering evidence regarding confidential information.

QLT next argues that the trial court erroneously failed to admit a document that purportedly corroborates MGH researchers conceived of using photodynamic therapy to treat before MEEI researchers did. We review a trial court's decision to exclude evidence under an abuse of discretion standard. Livick v. Gillette Co., 524 F.3d 24, 28 (1st Cir. 2008); Hoffman v. Applicators Sales & Serv., Inc., 439 F.3d 9, 13 (1st Cir. 2006).

The document at issue was one about which an MGH witness testified and which did not rely on BPD, the photodynamic agent found in Visudyne. This document was only marginally relevant, if relevant at all, especially since we already have determined that establishing the precise inventorship of each claim of the '591 application was not necessary to MEEI's patent benefit theory of unjust enrichment. QLT was not prejudiced by the exclusion of the document, and there was no abuse of discretion in its exclusion.

Finally, QLT raises a number of challenges relating to the jury instructions. An error in jury instructions warrants reversal only if the error is determined to have been prejudicial based on a review of the record as a whole. Davet v. Maccarone, 973 F.2d 22, 26 (1st Cir. 1992); Connors v. McNulty, 697 F.2d 18, 21 (1st Cir. 1983).

First, QLT asseverates that the instructions allowed the jury impermissibly to rely on the theory that QLT had to pay more for use of MEEI's confidential research than contract-specified amounts. The record in the case belies QLT's characterization. At QLT's request, the trial court specifically instructed the jury that any unjust enrichment had to be found "outside of whatever contracts MEEI had or Dr. Miller or Dr. Gragoudas personally had." The trial court further noted that all such contracts "have been performed. [MEEI, Miller and Gragoudas] did what they were supposed to do; QLT did what it was supposed to do. This is not a

contract case." We believe that the trial court explained the law as well as can be expected. Davet, 973 F.2d at 22 (citing Brown v. Trustees of Boston Univ., 891 F.2d 337, 353 (1st Cir. 1989)). Therefore, we find no error in this instruction, which was directly responsive to QLT's concerns.

Next, QLT challenges the trial court's unjust enrichment instruction.³⁰ Specifically, QLT maintains that the trial court's general unjust enrichment instruction was overly broad and therefore created a risk that the jury would find unjust enrichment based on theories other than the two theories actually submitted. It appears in large part that QLT's concerns were that the jury would reward MEEI for its general contribution to Visudyne.

Even if we assume *arguendo* that QLT properly preserved these objections and that they might have some merit, they are unavailing. It is true that in civil cases, "a new trial is usually warranted if evidence is insufficient with respect to any one of multiple claims covered by a general verdict." Gillespie v. Sears, Roebuck & Co., 386 F.3d 21, 29 (1st Cir. 2004) (quoting Kerkhof v. MCI Worldcom, Inc., 282 F.3d 44, 52 (1st Cir. 2002)). Moreover, this rule applies not only to general verdicts encompassing multiple causes of action, but also to special

³⁰The trial court instructed that MEEI had to prove that it "conferred an uncompensated benefit on QLT in circumstances where both parties, MEEI and QLT, expected that there would be compensation."

verdicts where a verdict question encompasses multiple theories, one of which is defective. Id. at 29-30 (citing Lattimore v. Polaroid Corp., 99 F.3d 456, 468 (1st Cir. 1996)). Nevertheless, this approach is by no means rigid. On the contrary, we have consistently recognized that a jury is "likely to prefer a better supported theory to one less supported," and consequently, we apply a generous harmless error analysis in order to determine whether it is reasonably likely that the jury in fact relied on a theory with adequate evidentiary support. Gillespie, 386 F.3d at 30 (citing Davis v. Rennie, 264 F.3d 86, 106 (1st Cir. 2001)). The litmus test of such a harmless error review is whether the appellant was "unjustly prejudiced." Davis, 264 F.3d at 106 (quoting Asbil v. Hous. Auth. of Choctaw Nation, 726 F.2d 1499, 1504 (10th Cir. 1984)).

In this case the jury was presented with substantial evidence regarding both of the theories of unjust enrichment that we specifically approved in our prior decision. Moreover, QLT does not (and cannot) contend that the trial court's charge regarding unjust enrichment was legally incorrect. See MEEI-II, 412 F.3d at 234 n.7. Where, as here, the jury heard a legally adequate instruction, which was supported by competent evidence, we will not assume jury confusion or verdict taint. See Davis, 264 F.3d at 109 (discussing analogous situation in which general verdict was based on two different claims rather than similar theories supporting the

same legal claim). Because it is highly likely that the jury grounded its unjust enrichment award on either or both of the two submitted theories, we conclude that QLT was not unfairly prejudiced.

We need go no further. We have considered the parties' remaining arguments and find them unavailing. After a careful review, we find no error in the conduct of the trial that was sufficiently prejudicial -- if it was error at all -- to warrant either reversal or a new trial.

E. Attorneys' Fee

As a coda to this protracted struggle, the parties have asked us to review the fee award.³¹ Here, in what was otherwise a harmonious opinion, we find a discordant note in the trial court's decision.

The trial court awarded MEEI attorneys' fee and costs totaling \$14,093,855.42. MEEI-III, 495 F. Supp.2d at 218. MEEI

³¹Where there has been a transgression of Chapter 93A, "the petitioner shall . . . be awarded reasonable attorneys' fee and costs incurred in such action." See Peckham v. Continental Cas. Ins. Co., 895 F.2d 830, 841 (1st Cir. 1990) (citing Mass. Gen. Laws ch. 93A, § 11). Neither party challenges the propriety of the attorneys' fee award; the quarrel is entirely over the amount of the award.

did not specifically request this amount, nor is it evident that this amount was the result of some mathematical reduction requested by QLT.

In announcing its fee award, the trial court noted that MEEI submitted an application for more than \$36,000,000 in fees and costs.³² Id. The trial court next listed a number of relevant factors derived from Linthicum v. Archambault, 398 N.E.2d 482 (Mass. 1979), abrogated on other grounds by Knapp Shoes, Inc. v. Sylvania Shoe M'fg. Corp., 640 N.E.2d 1101 (Mass. 1994). After reciting these factors, the trial court summarily announced its award. In so doing, the court provided no explanation of its evaluation of this case under the Linthicum factors.³³ Following a painstaking review of the record, we are unable to determine how the trial court arrived at its award.

We normally uphold attorneys' fee awards unless they constitute an abuse of discretion. French v. Corporate

³²The trial court made no mention that MEEI arrived at this princely sum based on the contingency fee arrangement that MEEI had concluded with its attorneys, rather than the customary calculation of attorneys' fees based on hours productively worked multiplied by appropriate hourly rates.

³³The Linthicum court identified a number of factors that a court should consider in arriving at a fee award, including: "the nature of the case and the issues presented, the time and labor required, the amount of damages involved, the result obtained, the experience, reputation and ability of the attorney, the usual price charged for similar services by other attorneys in the same area, and the amount of awards in similar cases." Linthicum, 398 N.E.2d at 488.

Receivables, Inc., 489 F.3d 402, 403 (1st Cir. 2007). In order to evaluate the trial court's exercise of its discretion, however, we must have some basis for understanding its reasoning. See Peckham, 895 F.2d at 842 ("Appellate review of fee awards ordinarily requires that concrete findings be made and that the court below supply a clear explanation of the reasons undergirding a particular fee award."). In other words, to evaluate a fee award, we must have some "indication" of the court's "thought processes and how he structured the award." Id. Cf. United States v. One Star Class Sloop Sailboat ("Flash II"), 546 F.3d 26, 42 (1st Cir. 2008) (explaining in context of federal fee-shifting statute that district court's attorneys' fee findings need not be "precise to the point of pedantry" and "need not be infinitely precise, deluged with details, or even fully articulated") (quoting Foley v. City of Lowell, 948 F.2d 10, 20 (1st Cir. 1991)) (additional citations omitted). Thus, for us to evaluate the trial court's fee award, we must, at a minimum, have insight, typically in the form of guidance from the trial court itself, that permits divination of the basis for the award. In the present case, the trial court has provided neither codex nor oracle to allow us to understand the award.

Therefore, we have no principled choice but to vacate the fee award and remand this case to the trial court so that it can reconsider the issue, fix an amount (whether the same or different

than its original award) and provide a record supporting its decision.

In ordering this remand, we are mindful of the need to prevent ancillary fee litigation from transforming into the tail that wags the dog. See Flash II, 546 F.3d at 42 (citing City of Burlington v. Dague, 505 U.S. 557, 566 (1992)). Nevertheless, it would be helpful for the trial court to consider and resolve (to the extent necessary) what we see as the parties' three primary contentions with respect to fees: (1) whether MEEI is entitled to any enhancement of its fees as a result of its contingency fee arrangement, see Fontaine v. Ebtec Corp., 613 N.E.2d 881, 890-91 (Mass. 1993); Siegel v. Berkshire Life Ins. Co., 835 N.E.2d 288, 294 (Mass. App. Ct. 2005); (2) what portion (if any) of the fees from related patent litigation MEEI is entitled to recover in the present case; and (3) whether any portion of the fees that MEEI claims to have incurred in the present case should be excluded as unsuccessful, unproductive and/or insufficiently related to the Chapter 93A claim. In highlighting these open questions, we intimate no view as to how they should be answered, nor do we suggest that they are the only open questions. We do note however, that resolution of these issues is committed, in the first instance, to the sound discretion of the trial court. We stress that nothing in our opinion should be construed as undermining the

trial court's "extremely broad" discretion to set fee awards. See French, 489 F.3d at 403.

III. Conclusion

For the reasons described above, the district court judgment as to liability and damages is **affirmed** in all respects. The attorneys' fee award is **vacated** and **remanded** for further proceedings consistent with this opinion. Two-thirds costs on appeal are awarded to MEEI.

So Ordered.