UNITED STATES DISTRICT COURT WESTERN DISTRICT OF KENTUCKY AT LOUISVILLE

CAUDILL SEED AND WAREHOUSE COMPANY, INC.

PLAINTIFF

VS.

CIVIL ACTION NO. 3:13-CV-082-CRS

JARROW FORMULAS, INC.

DEFENDANT

CORRECTED MEMORANDUM OPINION

This matter is before the court on motion of the defendant, Jarrow Formulas, Inc., for judgment as a matter of law or, in the alternative, for a new trial (DN 492).

This action, alleging violation of the the Kentucky Uniform Trade Secrets Act ("KUTSA"), KRS 365.880, et seq., was tried to a jury over a 3 ½ week period and resulted in a verdict in favor of Caudill Seed, a damage award totaling \$2,427.605.00, and a finding of willful and malicious misappropriation by Jarrow Formulas. Jarrow Formulas contends that there was insufficient evidence to support the jury's finding of misappropriation of Trade Secret 1, willful and malicious conduct, or damages.¹

For the reasons set forth below, we reject Jarrow Formulas' arguments. The court will deny Jarrow Formulas' motion for judgment as a matter of law or new trial and will affirm the award of compensatory damages in the sum determined by the jury.

¹ More particularly, the jury found that Caudill Seed possessed a trade secret with respect to research and development, the specific process for spray-drying myrosinase, vendor information, customer information, the laboratory notebook and hard drive. The jury found misappropriation of research and development, the specific process for spray-drying myrosinase, vendor and customer information, but not the laboratory notebook and hard drive. The jury awarded damages and found malicious and willful misappropriation only with respect to Caudill Seed's research and development.

I. General Background

Caudill Seed is a 65-year-old family-owned business located in Louisville, Kentucky which produces and supplies agricultural products including seeds, sprouts, and the like to commercial producers and distributors. It also sells ingredients for nutritional supplements, food and cosmetics, and sells some of its own nutritional supplements.

From 2002 until his resignation on May 2, 2011, Kean Ashurst ("Ashurst") was employed by Caudill Seed, holding a number of positions during that time. Pertinent to this litigation was his employment as Director of Research at Caudill Seed, with the responsibility for research and development of new products and processes in the area of the extraction, isolation, and development of compounds from broccoli seed including glucoraphanin, the myrosinase enzyme, and the production of sulforaphane. In that role, Ashurst had access to, worked with, and maintained as proprietary and confidential the body of research, data and information related to the development, production and marketing of broccoli seed extract and other related products.

Caudill Seed engaged in research and development related to seed and seed sprout production as well as processes for extracting, isolating and developing compounds from those products before, during, and after the period of Ashurst's employment with Caudill Seed. A significant body of research and development relating to seeds and seed extraction processes had been developed by Caudill Seed prior to Ashurst's arrival at Caudill Seed and was available to and utilized by Ashurst in his work for Caudill Seed.

During the years of his employment at Caudill Seed, Ashurst maintained crucial notes and formulas in stenographer's notebooks, a composition notebook, and on an external computer hard drive. He carefully guarded these items as they were the principal repositories for his task

lists, thought processes and research results in his work for Caudill Seed. He kept the lab locked and generally inaccessible. The steno pads were locked in a file cabinet and the lab notebook and hard drive were either kept with Ashurst or were locked in the lab. To Caudill Seed's great regret, it entrusted most of the memorialization of its science solely to Ashurst.

Broccoli extract proved to be valuable to Caudill Seed. Due to its high concentration of glucoraphanin, the consumption of which is thought to have positive health effects in humans, it was sought after by nutritional supplement manufacturers, and specifically Jarrow Formulas. Preceding his departure from Caudill Seed, Ashurst was working to develop a process to produce a glucoraphanin product that offered better release of sulforaphane, the beneficial compound yielded in the human body from the ingestion of glucoraphanin-rich material. The ability to produce a higher sulforaphane yield has been referred to as an "activated formula." Prior to Ashurst's resignation, Caudill Seed was preparing for commercial production of an activated formula broccoli extract product.

Jarrow Formulas was formerly a customer of Caudill Seed that purchased bulk quantities of Broccoraphanin, Caudill Seed's broccoli extract powder which Jarrow Formulas used in formulating its BroccoMax and other nutritional supplement products. Caudill Seed marketed its own broccoli extract nutritional supplement, Vitalica, and so competed with Jarrow Formulas in this aspect of its business. Jarrow Formulas was Caudill Seed's largest bulk purchaser of Broccoraphanin until Jarrow Formulas decided to cut out the middleman and become a broccoli extract manufacturer in 2011.

Jarrow Formulas had never before engaged in research and development or manufacturing of broccoli extract and in 2011 it had no scientists on staff capable of doing it.

Jarrow Formulas was interested in producing an activated formula of its BroccoMax and other

products. To that end, and in order to itself become a manufacturer of broccoli extract, it hired Ashurst away from Caudill Seed. The process of negotiation and transition began before Ashurst left Caudill Seed. Ashurst signed a consulting agreement with Jarrow Formulas the day before his resignation. When he left, the lab notebook and external hard drive containing Caudill Seed's critical formulas and research data disappeared. With its Director of Research gone and its laboratory in disarray, Caudill Seed was forced to essentially reverse engineer its own processes with the assistance of the testing facilities with which it worked. It took many months to get its house back in order, not in insignificant part due to the fact that it had permitted Ashurst to maintain and control all of its most critical information.

Caudill Seed also discovered that Ashurst provided numerous documents containing Caudill Seed's confidential and proprietary information in response to requests from Jarrow Formulas employees and agents. Ashurst acknowledged providing Caudill Seed documents to Jarrow Formulas.

Despite having no research and development of its own or any experience in the area of broccoli extract production, Jarrow Formulas created a successful manufacturing process and began producing a profitable activated formula mere months after hiring Ashurst as its consultant. Ashurst admitted that it was Jarrow Formulas' intention to "beat Caudill Seed to the punch" in bringing to market an activated formula broccoli extract product. Jarrow Formulas admitted and it was further proven at trial that Ashurst provided numerous confidential and proprietary Caudill Seed documents to Jarrow Formulas at Jarrow Formulas' request. Jarrow Formulas accomplished its goal of becoming a broccoli seed extract manufacturer and bringing an activated formula broccoli product to commercial production in four months' time, and subsequently succeeded in patenting its process for producing its activated formula.

II. Legal Standard

In this case, the court, sitting in diversity, "must apply the standard for judgment as a matter of law of the state whose substantive law governs." *Lindberg v. Jackson Nat'l Life Ins.* Co., 912 F.3d 348, 360 (6th Cir. 2018)(quoting DXS, Inc. v. Siemens Med.Sys., Inc., 100 F.3d 462, 468 (6th Cir. 1996)). Under Kentucky law, "a motion for directed verdict...should be granted only if there is a complete absence of proof on a material issue in the action, or if no disputed issue of fact exists upon which reasonable minds could differ. In deciding such a question, every favorable inference which may reasonably be drawn from the evidence should be accorded the party against whom the motion is made." Ventas, Inc. v. HCP, Inc., 647 F.3d 291, 314 (6th Cir. 2011)(quoting Morales v. Am. Honda Motor Co., 151 F.3d 500, 506 (6th Cir. 1998))(quoting Washington v. Goodman, 830 S.W.2d 398, 400; Baylis v. Lourdes Hosp., Inc., 805 S.W.2d 122, 125 (Ky. 1991)).

However, federal law governs the district court's decision whether to grant a new trial on the basis of the weight of the evidence, even in a case brought under our diversity jurisdiction. See Conte v. Gen. Housewares Corp., 215 F.3d 628, 637–38 (6th Cir. 2000); J.C. Wyckoff & Assocs., Inc. v. Standard Fire Ins. Co., 936 F.2d 1474, 1487 & n. 20 (6th Cir.1991).

Pursuant to Federal Rule of Civil Procedure 59(a) a new trial may be granted "in an action in which there has been a trial by jury, for any of the reasons for which new trials have heretofore been granted in actions at law in the courts of the United States." Fed.R.Civ.P. 59(a). Generally courts have interpreted this language to mean that a new trial is warranted when a jury has reached a "seriously erroneous result" as evidenced by: (1) the verdict being against the weight of the evidence; (2) the damages being excessive; or (3) the trial being unfair to the moving party in some fashion, i.e., the proceedings being influenced by prejudice or bias. See Montgomery Ward & Co. v. Duncan, 311 U.S. 243, 251, 61 S.Ct. 189, 194, 85 L.Ed. 147 (1940); Cygnar v. City of Chicago, 865 F.2d 827, 835 (7th Cir.1989); Mallis v. Bankers Trust Co., 717 F.2d 683, 691 (2d Cir.1983).

Holmes v. City of Massillon, Ohio, 78 F.3d 1041, 1045–46 (6th Cir. 1996). The district court "may compare the opposing proofs and weigh the evidence" when considering a new trial motion, Toth v. Yoder Co., 749 F.2d 1190, 1197 (6th Cir.1984), but "the jury's verdict should be accepted if it is one which could reasonably have been reached." Id. (quoting Bruner v. Dunaway, 684 F.2d 422 (6th Cir.1982), cert. denied, 459 U.S. 1171, 103 S.Ct. 816, 74 L.Ed.2d 1014 (1983)).

Jarrow Formulas does not make separate arguments concerning the application of these standards.

III. Jury Verdict

The jury found that Caudill Seed possessed certain trade secrets, that Jarrow Formulas misappropriated some of those trade secrets, that Jarrow Formulas acted willfully and maliciously, and awarded \$2,427,605.00 for Caudill's actual loss and Jarrow Formulas' unjust enrichment. The present motion focuses on the misappropriation of Trade Secret 1, the only trade secret for which the jury awarded damages and found willful misappropriation.

A. Misappropriation of Trade Secret 1

Jarrow Formulas urges that the jury could not reasonably find misappropriation of Trade Secret 1 because (1) Trade Secret 1 was not sufficiently defined; (2) the jury could not find that the entire compilation of Trade Secret 1 was misappropriated by Jarrow Formulas; and (3) Caudill failed to prove a combination of elements in Trade Secret 1 that was unique and not publicly known. We address these arguments in turn.

Before we opine on the sufficiency of the evidence to support the verdicts in this case, a comment on the briefing is in order. The court is aware of the suit filed in Connecticut against Jarrow Formulas seeking redress for its failure to pay its legal bills. Jarrow Formulas counterclaims in that action that its counsel failed to adequately defend in this misappropriation action.

This was a hard-fought case from its inception not in small part due to highly unusual facts and a clash of large personalities. As in most complicated trade secret litigation, many thousands of pieces of evidence were exchanged, claims were refined, theories of recovery and defense were formulated and tested, and evidence vetted, all before the case was ready to be tried to a jury.

In its response brief to the JMOL/new trial motion, Caudill Seed refers repeatedly to filings in the Connecticut action in which Jarrow Formulas criticizes its counsel's performance and alleged mismanagement of the case. This court's responsibility in considering the present motions is to focus on the sufficiency of the evidence adduced at trial in deciding whether the verdicts are properly supported. The court will not, therefore, engage in a "woulda, coulda, shoulda" analysis of what was not presented to the jury or what could have been presented differently. We thus disregard Caudill Seed's references to Jarrow Formulas' assertions of malpractice in the Connecticut action. Nothing in this opinion is meant to suggest a view as to the adequacy of Jarrow Formulas' counsel's performance in this case. As the court has noted, the case was hard-fought and well-tried by both sides, and a more attentive and committed jury this court has not seen in its many years on the bench.

Additionally, the wisdom (or lack thereof) of pretrial rulings which laid the groundwork for the issues presented at trial will be addressed by the Court of Appeals should the parties appeal. What the Sixth Circuit may make of the long and winding road down which this case has traveled is unknown. However, the court was early on convinced that Caudill Seed had a legally viable cause of action for the alleged misappropriation in this case and remains of that opinion today.

With respect to the motion for JMOL/new trial, the sole objective at this juncture is to determine whether evidence exists in the record to support the verdicts. The court may not compare the opposing proofs on JMOL review or reweigh the evidence, but rather must draw every favorable inference in favor of Caudill Seed and grant a motion for JMOL only if the court finds there is a complete absence of proof on a material issue in the action. Ventas, Inc., supra. The court may compare the opposing proofs in considering a motion for new trial, but such a motion may only be granted if the court determines that the jury has reached a seriously erroneous result. As with JMOL, a new trial motion must be denied if the verdicts could reasonably have been reached by the jury. Toth, supra. It is within the confines of this legal rubric that we render this decision.

Jarrow Formulas' consistent theme has been that Caudill Seed failed to sufficiently define Trade Secret 1. It pressed repeatedly pretrial for additional specificity and Caudill Seed, over time, refined its specification to the description which was ultimately provided to the jury. The court noted that "[i]t is not enough in effect to say, "the trade secrets you took are the ones we say you took," without further identification. DN 253, p. 7. Caudill Seed did provide evidence at trial of (1) specific times, temperatures, and pressures used in its process, (2) testing data, (3) discoveries concerning viable and non-viable processes, (4) a compilation of relevant scientific literature, and (5) its vendor, cost, and customer information the synthesis all of which constituted what it termed its "seed to shelf" process for producing glucoraphanin and activated

glucoraphanin as well as finished products Vitalica and Vitalica+. There were no surprises for Jarrow Formulas at trial. Jarrow Formulas clearly understood, prior to trial, the parameters of the "body of knowledge" Caudill Seed claimed was its misappropriated Trade Secret 1. Thus to the extent Jarrow Formulas again argues that Trade Secret 1 was insufficiently defined pretrial, we reject that argument.

Caudill Seed sufficiently circumscribed and defined Trade Secret 1, its "entire body of knowledge developed over the course of many years," for the jury through the evidence it adduced at trial. Trade Secret 1 was then fulsomely described in the jury instructions. In this motion, Jarrow Formulas has not asserted any error in the instructions given to the jury. Caudill Seed's witnesses testified to the research and development work with seeds and sprouts which began well before Ashurst became its Director of Research. Ashurst testified concerning the research and development conducted under his directorship in seed extraction processes, focused particularly on broccoli actives. He testified that he gave Jarrow Formulas a "body of knowledge." Vol. 2B (Ashurst), p. 66, ln. 11. Caudill testified that Ashurst was hired originally as an equipment engineer and was then moved into research, becoming the Director of Research, but having no prior knowledge or experience with broccoli seeds or extracts or the work Caudill Seed was doing in the lab. He learned the foundations and then continued to build the Caudill Seed know-how. Vol. 2 (Caudill), pp. 8-23. Caudill testified that its research put Caudill Seed on the road to product development. Vol. 1B (Caudill), 84:21-85:1. Caudill Seed adduced evidence from which the jury could reasonably have concluded that the confidential and proprietary materials which Ashurst undisputedly provided to Jarrow Formulas contained Caudill Seed's extensive and complete instruction on the process for successfully and profitably

producing the Caudill Seed products from "seed to shelf", enabling Jarrow Formulas to launch its own manufacturing operation in just a few months.

Jarrow Formulas complains that Caudill Seed's claim to trade secret protection for all of its research and development over a 17-year period is untenable. However, Jarrow Formulas has not shown, as it must, that Caudill Seed's contention is devoid of support in the record. Caudill Seed has made this case about more than a mere formula landing in the hands of a competitor. This case is about the misappropriation of an entire body of knowledge and know-how, built brick-by-brick on a broad foundation. See, e.g., PX6. This includes its precise and refined method for producing its products, the knowledge of which provided Jarrow Formulas the ability to entirely bypass any independent research and development in which it would necessarily have had to engage to become a manufacturer of such a raw ingredient. Jarrow Formulas was not a manufacturer of broccoli extracts until four months after Ashurst's arrival. Before that, it did not possess the knowledge, the science, or the personnel for such an endeavor.

Further, although fiercely disputed by Jarrow Formulas, Caudill Seed offered evidence that its process, founded in its research and development work and culminating in its commercially produced and profitably marketed product, was not publicly known or readily ascertainable by experienced scientists such that one could achieve what Jarrow Formulas achieved in four months. Jarrow Formulas achieved in four months what it took Caudill Seed a decade to discover, develop, and fine tune. Richie Sullivan, a salesman who worked closely with Ashurst, testified that as Ashurst worked for Caudill Seed, he was continually using and building on prior Caudill Seed discoveries, and that he had great concern when Ashurst abruptly resigned since Ashurst was the guy who knew everything. Vol. 3A (Sullivan), p. 24, ln. 13-15; p. 33, ln. 18-20. Darrell Smith, a process engineer, hired by Caudill Seed in 2012 in the aftermath of the

Ashurst departure, testified that its product could be reverse engineered by an outsider, but it would take a great deal of time and money. He testified that even an experienced scientist in the field could not have read the patents, journal articles, manuals, and research materials and come up with a reproducible marketable product in four months as Jarrow Formulas did. He testified that you had "to be there, see it, and do it." He testified that Caudill Seed was set back approximately nine months. Smith, DN 396, p. 7; accord, Vol. 2 (Caudill) p. 50-53.

Ashurst protested at trial that, for a knowledgeable scientist, this was not "rocket science," and that all the bits and pieces of the process were available in the public domain for anyone to use. He testified that although he provided documents to Jarrow Formulas that he admittedly should not have, Jarrow Formulas did not use them. He testified he was hired to be "a leader, not a follower," in developing an activated formula for Jarrow Formulas. See also, Rogovin, DN 428, p. 18 in which he testified that he intended for Ashurst to "build on" knowledge and know-how from Caudill Seed in bringing a mysrosinase-activated glucorophanin product to Jarrow. Ashurst, remarkably, had an epiphany about a new and ultimately patentable process for increasing the myrosinase within the broccoli seed within weeks of beginning his work for Jarrow Formulas.

Jarrow Formulas' expert, Leslie West, a medicinal chemist and former scientist at Kraft Foods for 34 years, similarly testified that Jarrow Formulas did not use any information that was not in the public domain, that Jarrow Formulas' process for producing its activated BroccoMax differs from the process used by Caudill Seed to produce Vitalica+, and that nothing Ashurst learned at Caudill Seed jump started Ashurst's work at Jarrow Formulas. Vol. 13 (West), 64:42-43; 48-50.

However, there was plenty of evidence offered by Caudill Seed that painted a very different picture, illustrating that the new process utilized by Jarrow Formulas to produce its activated formula broccoli extract could only have been achieved in four months' time with the research and know-how that came from Caudill Seed. John Minitelli from Valensa Lab testified that Ashurst had all of the parameters for testing on the very first phone call to Valensa one month after Ashurst's arrival at Jarrow Formulas. Vinitelli, DN 429, p. 7. Valensa performed its first large sale commercial run for Jarrow Formulas in October, 2011. Ibid. Caudill Seed adduced evidence that Ashurst provided, at Jarrow Formulas' request, a "roadmap" of the Caudill Seed processes (PX 277) as well as detailed customer order information, vendor information, test results on an activated formula, and a timeline for achieving its manufacturing goals. PX 43; PX 59; PX 240; Smith, DN 396, pp. 122-128. Ultimately, the jury did not credit Ashurst's story, and there was ample evidence from which the jury could reasonably find misappropriation of Trade Secret 1 by Jarrow Formulas.

Caudill Seed's theory of the case has been that Trade Secret 1 consists of its particular knowledge base built over many years and from which it developed its precise process for successfully manufacturing and competitively marketing its Vitalica, and later Vitalica+ products. Trade Secret 1 was described at trial as its method and know-how "seed to shelf" which provided Jarrow Formulas the ability to almost immediately begin successful and profitable commercial production of an activated formula broccoli extract product at the direction of Ashurst.

Ashurst had been working since 2009 on an activated formula at Caudill Seed and was on the verge of a breakthrough in early 2011. Caudill testified that they were getting ready to launch an activated formula product in March, 2011, and that Ashurst went to FONA, its vendor,

for that prupose. Ashurst went to FONA, then out to California to meet secretly with Jarrow Formulas. Vol. 2 (Caudill) 34:16-23; pp. 39-41. In late March/early April, he passed that wealth of knowledge and know-how and the refined process developed from years of testing and research on to Jarrow Formulas as a condition of his employment that he "deliver on the activated formula." See, e.g. PX 240; Vol. 2B (Ashurst) 68:5-7. Ashurst provided Jarrow Formulas test results from McCoy Labs on a myrosinase activated product. Caudill Seed established that in April 2011 Dallas Clouatre, on behalf of Jarrow Formulas, requested that Ashurst provide Caudill Seed's full research files on broccoli actives and that Ashurst did so. PX 35. Among other items, Jarrow Formulas received documents containing specific times, temperatures and pressures, blending specifics, vendor information, new product cost information, and a list of Caudill Seed's Broccoraphanin customers identifying what each ordered and its specific blend information.

The specificity required in a trade secrets case is wholly fact-dependent, thus no single case is controlling. However, we find a number of cases offer helpful guideposts in addressing the issues here.

In GlobeRanger Corp. v. Software AG USA, Inc., No. 3:11-CV-0403-B, 2015 WL 3648577 (N.D.Tx. June 11, 2015) where the trial court was similarly addressing JMOL and new trial motions, the defendant, AG, argued that liability for misrepresentation could not attach without Globe Ranger providing greater specificity in identifying its trade secrets than it had at trial. The court noted that plaintiff GlobeRanger's evidence identified what materials AG misappropriated and what aspects of those materials made them trade secrets, allowing the jury to distinguish between the trade secret and non-trade secret portions of these materials. Id. at *12. Here, the jury verdict evidences that Caudill Seed successfully did the same. It offered

evidence of the research and development in which it engaged culminating in its confidential and proprietary process by which it successfully and profitably manufactures and markets its broccoli extract and broccoli extract-containing products. Caudill Seed provided significant evidence from which the jury could reasonably conclude that the entirety of the know-how which could be derived from Trade Secret 1 provided Jarrow Formulas the building blocks from which it jump started its own manufacturing process for producing broccoli extract and broccoli extract products.

Citing Wellogix, Inc. v. Accenture, L.L.P., 716 F.3d 867, 875 (5th Cir. 2013), the court in GlobeRanger noted that it need only determine that Globe Ranger presented "enough evidence for a jury to legitimately conclude that the misappropriated information/materials contained at least some trade secrets." GlobeRanger, supra. at *12.

In GlobeRanger, AG argued that GlobeRanger failed to prove that its and GlobeRanger's products were similar or that GlobeRanger's claimed trade secrets included an "innovative feature" or "secret idea." Id. Here, Jarrow Formulas urges that Caudill Seed's and Jarrow Formulas' processes for their activated formulas differ, as evidenced by Jarrow Formulas' patent on its method, and that no aspect of Caudill Seed's process was unknown. In fact, Caudill Seed does not deny that Jarrow Formulas' method for making its activated formula differs from its own. However, Caudill Seed adduced evidence at trial that its know-how and precise "seed to shelf' method, the synthesis of the information and the precise method to achieve its results which were thus refined and employed by Caudill Seed, was well-guarded knowledge and not publicly known or readily ascertainable by proper means by others. Ashurst was subject to confidentiality agreements with Caudill Seed during his employment and he closely guarded the research and development knowledge for the company. Both Sullivan and Caudill testified

concerning the secrecy with which the Caudill Seed research and development was kept and Ashurst's possession and treatment of the notebook and hard drive. Vol. 2 (Caudill) pp. 24-26; Vol. 3A (Sullivan) 34: 9, 12. Again referring to Wellogix, the court in GlobeRanger explained:

Software AG argues that "like the plaintiff in Spear Marketing, GlobeRanger only could rely on circumstantial evidence of use," and that like in that case, the circumstantial evidence at trial "failed to show that any of Software AG's products or the 'Rave Solution' were similar to the 'Navy RFID Solution,' let alone that any of Software AG's products or the 'RAVE Solution' included an 'innovative feature[]' or a 'secret idea' comprising one of GlobeRanger's unspecified trade secrets." Id. at 18–19 (quoting Spear Marketing, 2014 WL 2608485, at *13) (brackets in original). Therefore, Software AG contends that GlobeRanger's claim should, likewise, be dismissed for failure to establish "use" of any trade secrets. See id. at 20. The Court, once again, disagrees.

"Use" for purposes of trade secret misappropriation is broadly defined as "any exploitation of the trade secret that is likely to result in injury to the trade secret owner or enrichment to the defendant," including "marketing goods that embody the trade secret, employing the trade secret in manufacturing or production, relying on the trade secret to assist or accelerate research or development, or soliciting customers through the use of information that is a trade secret." Gen. Universal Sys., Inc. v. HAL, Inc., 500 F.3d 444, 451 (5th Cir.2007) (quoting Restatement Third of Unfair Competition, § 40). In Wellogix, for example, the Fifth Circuit found sufficient evidence "to support the jury's finding that Accenture used [Wellogix's] trade secrets," including "that Accenture joined with SAP to develop a complex services component," during which time "they were able to access Wellogix's dynamic templates source code," and that Accenture's documents suggested they were using Wellogix's content. 716 F.3d at 877. The Fifth Circuit also found insignificant the differences that existed between Accenture's "complex services templates" and Wellogix's, reasoning that "the standard for finding 'use' is not whether Accenture's templates contained Wellogix trade secrets, but whether Accenture 'relied on the trade secrets to assist or accelerate research or development' of its templates." Id. (quoting HAL, 500 F.3d at 451) (internal brackets omitted). And since there was enough evidence for a jury to "legitimately infer ... that Accenture relied on Wellogix's templates to develop its own," the Fifth Circuit rejected Accenture's request for judgment as a matter of law on this basis. Id. at 877–78 (citations and quotation marks omitted).

Likewise, here, GlobeRanger produced sufficient evidence at trial to support the jury's conclusion that Software AG used its trade secrets in the development of the RAVE solution. Specifically, GlobeRanger showed that Software AG, like Accenture in Wellogix, "was hired to develop an RFID solution," and that during the RAVE project, Software AG gained access to GlobeRanger's trade secrets, including its "workflow XML and .net source code" through the live instances

that GlobeRanger had earlier installed for the Navy. Pl.'s Resp. Opp'n Mot. JMOL 21. GlobeRanger also presented documents from the RAVE team that Software AG was a part of, indicating, among other things, that the team was to "'replicate current [GlobeRanger] functionality." Id. (citation, quotation marks, and emphasis omitted) (brackets in original). Other Software AG documents referenced GlobeRanger's RFID solution, and suggested Software AG was accessing GlobeRanger's technology to meet the deadlines it faced in working on the project. See id.; Doc. 386, Pl.'s Resp. Opp'n Rule 59 Mot. 4 (further detailing use evidence). Despite differences between GlobeRanger's software and that employed by Software AG, the Court concludes that the above evidence is sufficient for a jury to reasonably infer that Software AG "relied on [GlobeRanger's RFID technology] to develop its own." Wellogix, 716 F.3d at 878 (citing HAL, 500 F.3d at 451).

Moreover, Software AG's reliance on the Court's decision in Spear Marketing is misguided. Spear Marketing involved a much different set of circumstances than those presented here. While the Court declines to cover those differences in detail at this time, a few differences bear mentioning. For one, contrary to Software AG's suggestions, the Court in Spear Marketing never stated that the plaintiff, SMI, must demonstrate "use" via evidence of access and similarity because of SMI's reliance on circumstantial proof; it simply indicated that SMI was permitted to—"may"—establish use "through the access-plus-similarity test [that] SMI propose[d]." 2014 WL 2608485, at *11. And this access-plus-similarity test was the only way SMI attempted to demonstrate "use," whereas GlobeRanger relied on circumstantial proof akin to the plaintiff's evidence in Wellogix. In addition, the evidence in Spear Marketing showed that the defendants gained limited access to SMI's products for wholly legitimate and non-suspicious reasons, whereas the evidence in this case indicates that Software AG gained much deeper access to GlobeRanger's products-including to its source code, manuals, and other proprietary information—in order to replicate GlobeRanger's technology. Similarly, the defendants in Spear Marketing had spent years developing a complex forecasting engine before gaining access to SMI's basic software, while in this case, Software AG admits to having no RFID product or software before the RAVE project, and the internal documents suggest that their purpose in accessing GlobeRanger's technology was to "replicate" its functionality. For these reasons and more, the Court finds these cases distinguishable. And because the above evidence is such that a jury could legitimately infer Software AG's "use" of GlobeRanger's trade secrets, the Court upholds the jury's finding on the issue of "use."

GlobeRanger Corp. v. Software AG USA, Inc., No. 3:11-CV-0403-B, 2015 WL 3648577, at *12-13 (N.D. Tex. June 11, 2015).

We quote extensively from GlobeRanger, not for any factual identity per se, but rather to illustrate the principle distinction between the compendium of cases relied upon in this case by

Jarrow Formulas and by Caudill Seed. Context is everything in this case. Jarrow Formulas has asserted a microcosmic view of the claim, insisting that Caudill Seed provide ever more specific and detailed description of Trade Secret 1, and urging the court to find that failure to do so is fatal to Caudill Seed's misrepresentation claim. Its request is untenable, and indeed, on the peculiar facts of this case, unjustified. Caudill Seed's contention is that it developed a knowledge base formulated from its research and development and culminating in its process for making its Vitalica and Vitalica+ products. Various components of this synthesis of knowledge are described in its articulation of Trade Secret 1. The court repeatedly noted throughout the litigation that some degree of circumscription of Trade Secret 1 was required in order for the jury to identify the purported trade secret and consider whether the evidence offered by Caudill Seed proves the existence of the trade secret and it was misappropriated by Jarrow Formulas. We concluded pretrial that Caudill Seed provided sufficient detail to allow the misappropriation claim to go forward. We now conclude that sufficient evidence was adduced at trial for the jury to reasonably conclude that Trade Secret 1 existed, was possessed and protected by Caudill Seed, and that Jarrow Formulas misappropriated Trade Secret 1 in violation of the KUTSA.

In our case, as in Globe Ranger, the "uniqueness" in Trade Secret 1 is not found in a particular secret feature adopted by the defendant. Rather, its unique and protectable value is that it afforded a proprietary and successful process and know-how synthesized from years of research and development which assisted or accelerated a misappropriator's development of its own similar product and process. In this instance, it was practically turnkey for Jarrow Formulas.

Similar to the proof in GlobeRanger, Caudill Seed adduced evidence that Ashurst was hired by Jarrow Formulas to "lead the industry, not follow it," in producing an activated formula and that time was of the essence to "beat Caudill Seed to the punch," that Jarrow Formulas was

totally ill-equipped to accomplish the task on its own, that Ashurst provided numerous confidential and proprietary Caudill Seed documents to Jarrow Formulas including, among many other documents, a "roadmap" of Caudill Seed's process "seed to shelf," at the request of Jarrow Formulas, and that Jarrow Formulas was up and running with an activated formula in a mere four months after Ashurst began employment there. There was also evidence adduced by Caudill Seed from which a jury could reasonably conclude that even a sophisticated scientist in the field would require significant study and facility with the method in order to build and develop from scratch the process that Jarrow Formulas achieved in a few months. Dallas Clouatre testified that the materials provided to Jarrow Formulas in response to its request for the most up to date collection of Caudill Seed's research on broccoli actives could only be whittled down by someone like Ashurst who spent all of his time in this particular arena. Clouatre, DN 426, p. 61. This evidences Jarrow Formulas' need for the Caudill Seed materials and, most importantly, an understanding of Caudill Seed's process and the know-how which came from its years of research and development. The only person equipped with Caudill Seed materials and the knowhow to implement its process was the very person to conduct that research and development for Caudill Seed, Kean Ashurst. We find, therefore, that a jury could reasonably infer that Jarrow Formulas misappropriated Caudill Seed's Trade Secret 1.

Other cases which acknowledge principles similar to those applied in GlobeRanger are Minnesota Mining & Manuf. Co. v. Pribyl, 259 F.3d 587 (7th Cir. 2001); Norbrook Laboratories Ltd. v. G.C. Hanford Manuf. Co., 297 F.Supp.2d 463 (N.D.N.Y. 2003); Imperial Chemical Indust. Ltd. v. *Nat'l Distillers & Chemical Corp.*, 342 F.2d 737 (S.D.N.Y. 1965); and Mangren *Research & Development Corp. v. Nat'l Chemical Company, Inc.*, 87 F.3d 937 (7th Cir. 1996).

In the Pribyl case, the defendants argued, as Jarrow Formulas does here, that the plaintiff failed to offer evidence that any specific information within the scope of the trade secret materials was actually secret or used or disclosed by the defendants. 259 F.3d at 594. In pertinent part, the court therein stated:

Throughout the course of their argument, defendants press 3M to divulge what specific information contained within the more than 500 hundred pages of materials could be considered secret. In doing so, defendants seem to suggest that if 3M cannot point to specific items within its manuals that are not known by the industry, then 3M cannot claim a trade secret in the combined product. We disagree. In order to be considered a trade secret, a pattern, technique, or process need not reach the level of invention necessary to warrant patent protection. A trade secret can exist in a combination of characteristics and components, each of which, by itself, is in the public domain, but the unified process, design and operation of which, in unique combination, affords a competitive advantage and is a protectable secret. See Syntex Ophthalmics Inc. v. Tsuetaki, 701 F.2d 677, 683 (7th Cir.1983).

There is no doubt that within the 500-plus pages of manuals at issue, there are a host of materials which would fall within the public domain. For example, 3M's instructions on how to clean the area around its machines, and how to properly assemble a cardboard box, surely cannot be considered independent trade secrets. Were 3M to bring Accu-Tech to court, claiming misappropriation on the basis that Accu-Tech was assembling ordinary cardboard boxes in a similar manner to 3M, we would not look favorably on such a claim. Yet, when all the cleaning procedures, temperature settings, safety protocols, and equipment calibrations are collected and set out as a unified process, that compilation, if it meets the other qualifications, may be considered a trade secret.

Contrary to defendants' suggestion, 3M is not attempting to preclude Accu—Tech from folding cardboard boxes. Rather, the company is seeking to prevent Accu—Tech from using and disclosing a process which it took the company six years and considerable income to perfect. These manuals and processes, even if comprised solely of materials available in the public domain, have been created by combining those materials into a unified system which is not readily ascertainable by other means. Thus, viewing the evidence in the light most favorable to 3M, we believe there was sufficient evidence to support the jury's finding that 3M has a trade secret in the operating procedures, quality manuals, trade manuals, process standards and operator notes for using 3M's equipment that makes resin sheeting.

Turning to the issue of misappropriation, we agree with the district court that there was sufficient evidence to support a powerful inference that defendants used 3M's operating procedures and manuals in establishing Accu—Tech's operations.

While it took 3M six years and countless resources in order to make its carrier tape operation efficient and profitable, Accu–Tech was able to almost immediately operate its resin sheeting line effectively. Furthermore, evidence adduced at trial established that there are significant similarities between 3M's carrier tape line and Accu–Tech's resin sheeting line...As the district court stated, "[t]he inference is virtually inescapable that defendants gained a significant head start in their operation by using the trade secret knowledge they learned from plaintiff concerning the operation and standards for the line." We agree that when this evidence, along with all the reasonable inferences that may be drawn from it, is viewed in the light most favorable to 3M, it constitutes sufficient support for the jury's verdict. As such, we affirm the district court's denial of Accu–Tech's motion for judgment as a matter of law on the issue.

3M v. Pribyl, 259 F.3d 587, 595–96 (7th Cir. 2001). In the case at bar, Caudill Seed offered evidence that it spent 17 years, 11 of them with Ashurst at the helm, working to develop its own system for producing its broccoli extract product, and that it jealously guarded the precise details and formulations. The evidence in this case also supports a powerful inference that Jarrow Formulas availed itself of Caudill Seed's research and development to gain a significant head start in formulating and developing its own process.

Jarrow Formulas attempts to distinguish Pribyl, stating that the trade secret there was not a compilation trade secret, but was 3M's operating procedures and manuals, which were taken in their entirety. Jarrow Formulas offers this argument despite the fact that the same contention was made in Pribyl - that there can be no trade secret claimed in the whole because it is simply the sum of publicly-known parts. The manuals and operating procedures in Pribyl are no less a compilation of information than the information which constitutes Trade Secret 1. As for the argument that Pribyl is distinguishable because 3M's operating procedures and manuals were taken in their entirety, Caudill Seed's proof at trial concerning (1) the nature and extent of its research and development over the years, (2) its development of its products and processes, (3) the materials which were admittedly provided to Jarrow Formulas, (4) Jarrow Formulas'

immediate ability to become a broccoli seed extract manufacturer and to develop a patentable method for an activated formula is more than sufficient to support the jury's conclusion that the entirety of Trade Secret 1 was misappropriated by Jarrow Formulas.

In Imperial Chemical, in the context of the alleged breach of a secrecy obligation in a licensing agreement, the United States Court of Appeals for the Second Circuit addressed whether the existence or emergence in the public domain of portions of the licensed confidential process impacted the defendant's obligation to keep secret the licensor's unified process. The Second Circuit stated the following conclusions with respect to trade secret protection:

'The literature available to the public describes some of the general concepts and most of the design, construction, operation and process components involved in the I.C.I. Mark I stirred autoclave reactor for polyethylene production, as disclosed in the manual and under the Technical Assistance Agreement. However, there is no unified description anywhere in the literature of the process, design or operation of I.C.I.'s Mark I stirred autoclave reactor. Although the components of such reactor are available in the literature, development of the know-how as a totality successfully and safely to operate a commercial process using such a reactor based upon information in the public domain would have required vast research, at great expense in money and time, plus considerable trial and error over an extended period of time. In making its agreements with I.C.I., it was obviously Petro's purpose to avoid the difficulties and the time and expense that would be required to arrive at a commercially feasible process from a synthesis of the information disclosed in the literature and independently of disclosures of the secret processes and trade secrets made by I.C.I.'

It is no defense in an action of this kind that the process in question could have been developed independently, without resort to information gleaned from the confidential relationship. As stated in the landmark case of Tabor v. Hoffman, 188 N.Y. 30, 35, 23 N.E. 12 (1889):

'Even if resort to the patterns of the plaintiff was more of a convenience than a necessity, still, if there was a secret, it belonged to him, and the defendant had no right to obtain it by unfair means, or to use it after it was thus obtained.'

Although the court went on to say that anyone is at liberty to discover the secret and use it thereafter with impunity, that fact does not excuse the obtaining of a secret by improper means or the inequitable use of the same. Herold v. Herold China & Pottery Co., 257 F. 911 (6th Cir. 1911); Schavoir v. American Re-

Bonded Leather Co., 104 Conn. 472, 133 A. 582 (1926); International Industries, Inc. v. Warren Petroleum Corp., 99 F.Supp. 907 (D.Del.1951).

Although in its finding, the trial court found that a unified description of the process was still a secret, known only to I.C.I. and its licensees, it made no reference to it in its conclusions of law. Presumably it simply felt that under its interpretation of the secrecy provisions of the agreements, the fact that eight of the nine components were matters of public knowledge and therefore in the public domain and only the component relating to the motor enclosed within the reactor and the unified description of the way the components were put together and made to work were still secret, the whole process could not any longer be said to have been solely acquired from I.C.I. and that therefore National was free to disclose everything about it to Toyo. As we construe the agreements, however, any material part of the information which Petro first learned from the manual and drawings or first learned from the use of the manual and drawings, which was still secret at the time of the trial, is a trade secret of I.C.I. for which equitable protection may be afforded.[fn. omitted].

Indeed, in reflecting on the discussions of the whole process involved in this case and the importance of the reactor, it appears at least doubtful that there would be much of a demand for the information contracted to be sold by National to Toyo if the unified description of the process, design and operation of the stirred autoclave reactor were withheld. If National's R101 reactor is substantially similar to I.C.I.'s Mark I and if, as National argues, it and everything else in the means and method of production is in the public domain, it is not very clear why Toyo is paying about \$6,000,000 for information it could so easily get from a technical library. With the close similarity between the Mark I and the R101 it would be surprising if improvements by National were worth that much. If an important part of what Toyo seeks is the still secret know-how in putting the components of the reactor together and making them work effectively, then it is unfair for National to reap a financial return by breaching the non-assignable licensing agreements, and by taking a payment for something which is I.C.I.'s to license...

Imperial Chem. Indus. Ltd. v. Nat'l Distillers & Chem. Corp., 342 F.2d 737, 742–44 (2d Cir. 1965).

Jarrow Formulas finds Imperial Chemical inapposite, as the case was not decided under the Uniform Trade Secrets Act, but instead pursuant to the terms of licensing agreements governing secrecy obligations related to information the plaintiff voluntarily disclosed. Additionally, Jarrow Formulas asserts that the entire compilation in question, the so-called "unified process," was a trade secret voluntarily disclosed, while in Caudill Seed's case, it was not.

The import of the case, and the principle for which it is often cited, is that despite the fact that the components of the unified process were found in the public domain, the court recognized a protectable trade secret in "the development of the know-how as a totality successfully and safely to operate a commercial process" since to do so from pieces of information in the public domain "would have required vast research, at great expense in money and time, plus considerable trial and error over an extended period of time," and concluding that was unfair for the defendant to reap the benefit of that unified process "even if resort to the patterns of the plaintiff was more of a convenience than a necessity." Ibid. The bedrock principle remains applicable in trade secret law even after the adoption of Uniform Trade Secret Act "UTSA" statutes in most all of the United States.

The case of Norbrook Laboratories Ltd. v. G.H. Hanford Mfg. Co., 297 F.Supp.2d 463 (N.D.N.Y 2003) quotes at length from Imperial Chemical under facts similar to those in this case. In Norbrook, the chemist, Dr. Phillip Quinn, who had worked for Norbrook exclusively on the development of an in-situ manufacturing process for PGP injections, was hired by a competitor, Hanford. Similar to the evidence in the present case, Hanford had never seen manufacturing instructions or experimental work concerning the development or implementation of an in situ method for manufacturing PGP injections prior to the arrival of Dr. Quinn. Without belaboring the details of the evidence concerning Dr. Quinn's communications with Hanford and the information revealed about the in situ method based upon his experience while at Norbrook, it is sufficient to state that both Quinn and Ashurst provided extensive proprietary and confidential information to their new employers in anticipation of their work to come. Hanford

thereafter proceeded to develop and implement the in situ method under Dr. Quinn's tutelage and generated a successful sample batch pf PGP produced using the in situ method in a matter of weeks and a commercial batch a month later. In determining that Hanford's argument that it developed the in situ method of manufacture independent of Dr. Quinn "finds little support in the record," the court found:

In characterizing Dr. Quinn's work for Hanford, the court has purposefully used both "development" and "implementation" to underscore the following: because of Dr. Quinn's prior experience and knowledge, most poignantly the experience and know-how that he culled from his years of employment at Norbrook, Hanford was able to forgo much of the experimentation normally associated with the development of such a process. Dkt. No. 73, Trial Tr. at 1052–53...Dr. Quinn's work allowed Hanford to convert its manufacturing process from one that utilized the conventional method to one that utilized the in situ method. Dkt. No. 69, Trial Tr. at 504–510...

Dr. Quinn was able to surmise, based upon his experience and knowledge gained while at Norbrook, that he could adapt Hanford's formula to an in situ method and thereby saved Hanford from having to conduct its own trial and error work. Similarly, Hanford benefitted greatly from Mr. Lemancyzk's observation of Dr. Quinn's recreation of the in situ method at Univet in Ireland. The method "was easy ... after seeing how it was made at Univet." Dkt. No. 69, Trial Tr. at 440; see also Pl.'s Ex 98; Dkt. No. 68, Trial Tr. at 400–01 (Mr. Cross wrote and Mr. Lemanczyk testified that Dr. Quinn's 1,000–litre batch contributed "markedly to [Hanford's] development efforts.").

Dr. Quinn's manufacturing instructions served as the foundation for the process that Hanford ultimately submitted to the FDA...Hanford did not attempt to produce a batch of PGP, experimental or otherwise, using the in situ method until November 16, 2000, or nearly eleven months after Hanford received instructions for a successful in situ method of manufacture from Dr. Quinn. Dkt. No. 68, Trial Tr. at 396–97; Dkt. No. 71, Trial Tr. at 693–94; Def.'s Ex. 27. Thereafter, Hanford conducted fourteen trial batches, consisting of nine engineering batches and five full-scale batches, two of which were aborted, before finalizing the manufacturing instructions used in the application to the FDA for approval of its in situ method. Dkt. No. 71, Trial Tr. at 694–97; Def.'s Ex. 27. Hanford performed limited testing on these fourteen batches. Dkt. No. 72, Trial Tr. at 807–08; Def.'s Ex. 27...

Obviously, Hanford was in a position to try to develop an in situ method without Dr. Quinn but elected not to spend the time and effort or incur the risks associated with doing so. Dkt. No. 73, Trial Tr. at 1052–53...

The court does not mean to suggest that Hanford failed to conduct any independent experimentation or work...The court, however, finds on the record that Hanford's truly independent work occurred well after the issue was no longer in doubt and the second-string QB had entered the game for mop-up duty.

As discussed more fully below, the information Dr. Quinn provided Hanford about the in situ method for manufacturing PGP injections constituted trade secrets belonging to Norbrook: the information Dr. Quinn provided to Hanford was based on the work he completed for Norbrook in developing its in situ method. Dkt. No. 69, Trial Tr. 490–91, 514–15, 521; Dkt. No. 70, Trial Tr. 535–48, 550–51, 555; Pl.'s Exs. 86, 94 and 102. Significantly, Dr. Quinn worked with all of the excipients contained in Hanford's formulation while developing Norbrook's in situ method. Dkt. No. 69, Trial Tr. 523, 528–529; Pl.'s Ex 1. It was thus easy for Dr. Quinn to provide Hanford with the information it needed concerning the essential parameters and equipment involved in the in situ method.

Norbrook Labs. Ltd. v. G.C. Hanford Mfg. Co., 297 F. Supp. 2d 463, 477–79 (N.D.N.Y. 2003), aff'd, 126 F. App'x 507 (2d Cir. 2005). In rejecting Hanford's contention that Dr. Quinn's consultancy with Hanford was irrelevant because Hanford would have eventually developed its in situ method on its own, the court stated that

The trial and error work in which Norbrook engaged to develop its in situ method is both evidence that the method is a trade secret, and that it is entitled to trade secret protection. See Integrated Cash Mgmt. Servs., Inc., 732 F.Supp. at 375–77 (finding that a trade secret existed where a company had expended substantial time and money in trial and error experimentation with different formulations of its computer program, and enjoining its two former employees from using the information they learned through their familiarity with the trial and error process); Inflight Newspapers, Inc. v. Magazines In-Flight, LLC, 990 F.Supp. 119, 132 (E.D.N.Y.1997) (finding that the trade secret at issue was "not the finished product" but rather the process, derived from years of trial and error research, by which the finished product resulted). More to the point, in explaining why plaintiff's technology was afforded trade secret protection, the court in Monovis v. Aquino, noted that plaintiff's Know-How serve[d] as a guide, charting the way through the many problems and decisions faced in designing ... and developing [the particular technology]. At each step along the way, [plaintiff] identifie[d] the problems and possible solutions and endeavor[ed] to explain the best way to proceed...Such knowledge is clearly valuable and should be protected from wrongful misappropriation by those exposed to it under a duty of confidence. 905 F.Supp. at 1231.

Similarly, in Imperial Chemical Industries Limited v. National Distillers and Chemical Corp., 342 F.2d 737, 743 (2d Cir.1965), the Second Circuit, in

reversing the trial court's denial of plaintiff's motion for a preliminary injunction, emphasized the trial court's finding that although the components of the [manufacturing process] are available in [literature available to the public], development of the know-how ... to operate a commercial process using such a [component] based upon information in the public domain would have required vast research, at great expense in money and time, plus considerable trial and error over an extended period of time. In making its agreements with [plaintiff], it was obviously [defendant's] purpose to avoid the difficulties and the time and expense that would be required to arrive at a commercially feasible process from a synthesis of the information disclosed in the literature...

Without Dr. Quinn, Hanford would not have developed an in situ method as readily as it did. As a result of his work for Norbrook, Dr. Quinn developed a significant body of knowledge concerning the in situ method for manufacturing PGP injections, including how various excipients interact, and how the parameters may change depending upon the specific excipients used in a particular product's formulation. During his consultancy with Hanford, Dr. Quinn applied this body of knowledge for Hanford's benefit. Dkt. No. 67, Trial Tr. at 139–40, 142–43; Dkt. No. 69, Trial Tr. at 521–23, 526–29; Dkt. No. 73, Trial Tr. at 979–80.

Norbrook Labs. Ltd. v. G.C. Hanford Mfg. Co., 297 F. Supp. 2d 463, 485, 488 (N.D.N.Y. 2003), aff'd, 126 F. App'x 507 (2d Cir. 2005).

Finally, Hanford argued that Dr. Quinn was free to apply "the skills and knowledge acquired by the overall experience of his previous employment ... [including] those techniques which are but 'skillful variations of general processes known to the particular trade.' "Dkt. No. 76, Def.'s Proposed Findings of Fact and Conclusions of Law at 68 (quoting PSC, Inc. v. Reiss, 111 F.Supp.2d 252, 257 (W.D.N.Y.2000)) (citation and internal quotations omitted). The court found, however, that

The information and services Hanford wanted and that Dr. Quinn provided were not mere skillful variations of general processes known throughout the veterinary pharmaceutical industry. Instead, Hanford sought, and Dr. Quinn provided, the same kind of in situ method for manufacturing PGP injections used by Norbrook, or in other words, Norbrook's proprietary information. In hiring Dr. Quinn, Hanford was interested only in the fact that he had worked on Norbrook's in situ method...Dr. Quinn did not merely fine-tune Hanford's conventional method in order to improve its efficiency; rather, he took Hanford's existing formulation,

determined that it was suitable for an in situ method of manufacture and then showed Hanford how to accomplish this feat. As Mr. Ward testified, what Dr. Quinn "talked to Steve Lemanczyk about, I can't tell you," Id. at 240, but Mr. Lemanczyk testified that Dr. Quinn was the key to Hanford's efforts in developing the in situ method. Dkt. No. 68, Trial Tr. at 401.

Norbrook Labs. Ltd. v. G.C. Hanford Mfg. Co., 297 F. Supp. 2d 463, 489–90 (N.D.N.Y. 2003), aff'd, 126 F. App'x 507 (2d Cir. 2005). The same is true in this case. There is evidence to reasonably support the conclusion that Jarrow Formulas wanted Caudill Seed's trade secrets and Ashurst himself in order to shortcut its research and development time in establishing a successful broccoli extract manufacturing process and to launch an activated formula broccoli extract supplement product first in the market. Based upon the evidence concerning the extent of Caudill's research and development over the years and Ashurst's admitted years of work and impending breakthrough on an activated formula, a jury could reasonably conclude that without Ashurst and the information he provided, Jarrow Formulas would not have achieved its goal in four months. While Jarrow Formulas could arguably have independently succeeded in reaching its goals, no specific evidence was offered concerning the time it would take Jarrow Formulas to do so. Most important, however, is that it in fact did not do so. There was sufficient evidence from which the jury could reasonably infer that Ashurst's efforts were not simply a skillful manipulation of general and well-known processes, but rather that misappropriation of Trade Secret 1 enabled Jarrow Formulas' successes.

Finally, we note that in *Mangren Research and Development Corp. v. Nat'l Chemical* Company, Inc., 87 F.3d 937 (7th Cir. 1996) the United States Court of Appeals for the Sixth Circuit affirmed the district court's determination to uphold a jury verdict finding trade secret misappropriation where a former employee began manufacturing and marketing a product substantially derived from the plaintiff's trade secret. Mangren involved the misappropriation of a particular formula rather than the type of synthesis of information we have in this case. The

import of the decision, however, is that the defendant need not be shown to have copied or used each and every element of a trade secret in order to find that defendant misappropriated it, if the evidence establishes that the substance of the defendant's process is derived from the trade secret. The court noted that "if trade secret law were not flexible enough to encompass modified or even new products that are substantially derived from the trade secret of another, the protections that law provides would be hollow indeed. Innovative Constr., 793 F.2d at 887; American Can Co. v. Mansukhani, 742 F.2d 314, 329 (7th Cir.1984)." Mangren Research & Dev. Corp. v. Nat'l Chem. Co., 87 F.3d 937, 944 (7th Cir. 1996). In other words, the focus is on what was foundational to the purported misappropriator's ability to create the new product or process. The court in Mangren instructed, "You may find that defendants misappropriated Mangren's trade secrets even if defendants created a new product if defendants could not have done so without use of Mangren's trade secret." Id. at 944. This principle applies equally to this case inasmuch as there was ample evidence for the jury to reasonably conclude that Jarrow Formulas acquired Trade Secret 1 and then developed a process for an activated formula from Caudill Seed's trade secret.

Caudill Seed presented evidence in support of its theory that Jarrow Formulas misappropriated years of trial and error work in developing formulas and processes from which Caudill Seed established its profitable, commercialized process for manufacturing its nutritional supplements from broccoli seed. Clay Dubose, the Vice President of Sales for Jarrow Formulas, termed Jarrow Formulas' actions as a "vertical integration strategy" to make a couple of their own base materials and thereby reduce their cost. Dubose, DN 412, 45:4-8. Such a strategy is permissible and, indeed, good business, unless it is accomplished by misappropriating another's trade secrets.

The court instructed the jury with respect to the claim of misappropriation of Trade Secret 1 as follows:

Trade Secret Misappropriation

Caudill Seed claims that Jarrow Formulas misappropriated its trade secrets in violation of the Kentucky Uniform Trade Secrets Act ("KUTSA"). In order to succeed on this claim, Caudill Seed must prove that each of the following elements is more likely true than not true:

- 1. That Caudill Seed possessed one or more trade secrets as defined by KUTSA; and
- 2. That Jarrow Formulas misappropriated one or more of Caudill Seed's trade secrets.

"Trade Secret" Defined

In considering whether Caudill Seed possessed one or more trade secrets as defined by KUTSA, you will consider the following:

KUTSA defines a trade secret as information, including a formula, pattern, compilation, program, data, device, method, technique, or process, that:

- (a) Derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; and
- (b) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

Caudill Seed claims that it possessed six trade secrets, as follows:

1. Caudill Seed's research and development related to dietary supplements, broccoli plant material (including seeds and sprouts), and the many years of trial and error research and compilation and analysis of data and technical information related to: (a) the chemical

compounds at issue in this case, including glucoraphanin (also known as sulforaphane glucosinolate), myrosinase and sulforaphane; (b) the concentration, isolation and testing of those chemical compounds in broccoli plant material (including seeds and sprouts); (c) the extraction of those chemical compounds from broccoli plant material; and (d) the viable and nonviable processes for producing nutritional supplements, ingredients or other consumer goods derived from broccoli plant material and containing those chemical compounds. Caudill Seed is claiming trade secret protection for its entire body of knowledge developed over the course of many years...

"Independent economic value" means the claimed trade secret(s) must give Caudill Seed an actual or potential competitive advantage over others. Information that has commercial value from a negative viewpoint, such as the results of lengthy and expensive research which proves that a certain process will not work may be a trade secret, so long as otherwise meets the requirements to be a trade secret. Any advantage to Caudill Seed must arise from the fact that the claimed trade secret(s) are not generally known or readily ascertainable by proper means by others.

Information is "generally known or readily ascertainable by proper means" when it is capable of being legitimately acquired by others without undue difficulty or hardship. Matters that are generally known to the public at large or to people in the relevant trade or business are not trade secrets. It also cannot be a trade secret if the information would be easy to find using publicly available information by persons who can obtain independent economic value through use of the information. However, even if the information could be learned through reverse engineering or compiling several publicly available sources, it may be considered a trade secret if it would be difficult, costly or time-consuming to do so. Examples of readily ascertainable information include trade journals, reference books, published patent applications and patents, and other similar materials.

In deciding whether the information is secret, you should consider whether the information as a whole is a secret, rather than looking at any or even all of its individual components. Combinations of public information from a variety of different sources, when combined in a unique way, can be a trade secret...

"Misappropriation" Defined

In considering whether Jarrow Formulas misappropriated one or more trade secrets as defined by KUTSA, you will consider the following:

"Misappropriation" means either:

- (1) Acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means; or
- (2) Disclosure or use of a trade secret of another without express or implied consent by a person who did one or more of the following:
 - (a) Used improper means to acquire knowledge of the trade secret;
 - (b) At the time of disclosure or use, knew or had reason to know that his/her knowledge of the trade secret was derived from or through a person who had utilized improper means to acquire it, acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use, or derived from or through a person who owed a duty to the person to maintain its secrecy or limit its use; or
 - (c) Before a material change of his position, knew or had reason to know that it was a trade secret and that knowledge of it had been acquired by accident or mistake.

"Improper means" includes theft, bribery, misrepresentation, and breach or inducement of a breach of a duty to maintain secrecy.

Caudill Seed's KUTSA claim against Jarrow Formulas may not be predicated solely on the acts or omissions of Kean Ashurst, as he is not a defendant in this case. Instead, Caudill Seed must demonstrate that is more likely true than not true that another officer, employee, or agent of Jarrow Formulas did some independent act constituting "misappropriation" as defined within this Instruction.

Caudill Seed offered evidence at trial illustrating its development of a substantial base of knowledge from which its specific products and processes were created. Rory Lipsky testified that Jarrow Formulas had no prior research on broccoli products. DN 424, 38:12-24; 10:14-18. None. Zero. Yet four months after it hired Ashurst away from Caudill Seed it was commercially capable of manufacturing an activated broccoli seed product. The evidence was thus sufficient to support a conclusion that the achievement likely resulted from Jarrow Formulas' misappropriation of Caudill Seed's "seed to shelf" process, the "roadmap" provided by Ashurst to Jarrow Formulas at Jarrow Formulas' request. PX277.

Thus the evidence belies Jarrow Formulas' assertion that Caudill Seed failed to adduce any evidence of the elements that make up the compilation, failed to establish the way in which the elements fit together in a unique way, and failed to adduce evidence that Jarrow Formulas acquired or used Caudill Seed's Trade Secret 1.

Jarrow Formulas seeks to deflect from the big picture presented by Caudill Seed. Caudill Seed argued effectively to the jury that Jarrow Formulas could not have not become a broccoli seed extract manufacturer producing an activated glucoraphanin product in four months' time without the acquisition of Trade Secret 1. Caudill provided ample evidence of its development and testing over the years and the processes and resources it utilized to ultimately produce a successful and profitable product. Ashurst engaged in eleven years' worth of that research and development and provided the "roadmap" to to Jarrow Formulas.

Jarrow Formulas had no other answer for its success in "beating Caudill Seed to the punch." Faced with evidence that Ashurst provided Jarrow Formulas Caudill Seed critical confidential and proprietary documents and immediately began the manufacturing process at Jarrow Formulas, it argues that Trade Secret 1 is not unique and so is not protectable under KUTSA. KUTSA does not require the novelty or uniqueness of patentable products or processes. Rather, KUTSA requires that trade secrets "derive independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use." KRS 365.880(4)(a). This is precisely what Caudill Seed proved with substantial evidence including, in part, Jarrow Formulas' own achievement, enabled by its acquisition of Trade Secret 1. The evidence adduced by Caudill Seed reasonably supports the conclusion that Jarrow Formulas sought turnkey ability to successfully and profitably manufacture a broccoli extract, and that Caudill Seed's body of knowledge derived through years of work provided that ability. This is what Jarrow paid Ashurst to deliver and its investment yielded it profits.

Jarrow Formulas urges that Caudill Seed failed to prove that it could not have independently engineered activated glucoraphanin and produced its product without the acquisition or use of Trade Secret 1. However, Caudill Seed proved that Jarrow Formulas had no foundation in the science of the process and had never before engaged in such manufacture, yet succeeded in producing its activated BroccoMax product in four months. Jarrow Formulas might have shown an equally plausible explanation for its success which did not involve hijacking Caudill Seed's trade secrets, but it offered no such evidence.

Jarrow Formulas argued that because it utilizes a process that it was able to patent, Caudill Seed cannot succeed on its claim for misappropriation. This contention ignores the

evidence supporting the proposition that Jarrow Formulas' acquisition of Caudill Seed's trade secrets enabled it to bypass years of research and development in reaching what it would ultimately patent.

"Use" under the Restatement (Third) Unfair Competition suggests that the concept is not as narrow as Jarrow Formulas would like it to be:

As a general matter, any exploitation of the trade secret that is likely to result in injury to the trade secret owner or enrichment to the defendant is a "use" under this Section. Thus, marketing goods that embody the trade secret, employing the trade secret in manufacturing or production, relying on the trade secret to assist or accelerate research or development, or soliciting customers through the use of information that is a trade secret (see § 42, Comment f) all constitute "use."

§ 40, cmt. c, Restatement (Third) Unfair Competition.

Jarrow Formulas' cases feed into its "divide and conquer" strategy in the case. It contended that the contours of Caudill Seed's Trade Secret 1 could not be divined with mere generalizations that Trade Secret 1 consisted of "its body of knowledge developed over many years." However, Caudill Seed described this claimed body of knowledge as its research and development, trial and error research, and compilation and analysis of data and technical information is various highlighted areas.

Jarrow Formulas cited Sit-Up Ltd. v. IAC/InterActiveCorp., No. 05 CIV. 9292 (DLC), 2008 WL 463884, at *9-10 (S.D.N.Y. Feb. 20, 2008) in support of its argument that Caudill Seed has failed to show how the elements of its "body of knowledge" fit together in a unique combination.

[S]it-up brings a claim for trade secret misappropriation with regard to its "secret sauce"-its "overarching business method," comprised of the more than one hundred alleged individual trade secrets-which permits it to run a successful falling-price auction channel. Under New York law, "a trade secret can exist in a combination of characteristics and components, each of which, by itself, is in the public domain, but the unified process, design and operation of which, in unique

combination, affords a competitive advantage and is a protectable secret." Integrated Cash Mgmt. Serv., Inc. v. Digital Transactions, Inc., 920 F.2d 171, 174 (2d Cir.1990) (citation omitted). Here, sit-up has not demonstrated the "way in which [the] various components fit together as building blocks in order to form the unique whole," id. (citation omitted), and thus has not raised a triable issue of fact as to its "unique combination," id. (citation omitted). Therefore, defendants' motion for summary judgment on this claim is granted... Here, sit-up has offered no such concrete evidence that its business method uniquely strung together certain elements in a particular way. Rather, sit-up would have the Court infer that, because it ran a successful falling-price auction business, its combination of various, possibly secret, data and business protocols must have been unique. Raising the specter of trade secret appropriation in this manner does not substitute, however, for evidence that the more than one hundred individually identified alleged trade secrets were somehow combined by sit-up to form a unique whole.

Sit-Up Ltd. v. IAC/InterActiveCorp., No. 05 CIV. 9292 (DLC), 2008 WL 463884, at *9-10 (S.D.N.Y. Feb. 20, 2008).

We find, in contrast to the 100 discrete and individual trade secrets alleged in Sit-Up which the court found were not shown to be strung together in a particular way, Caudill Seed offered evidence at trial from which a jury could reasonably find Caudill Seed's development of its knowledge base in the areas identified in its description of Trade Secret 1 yielded its particular method and the know-how to successfully and profitably produce its products, demonstrated the "way in which [the] various components fit together as building blocks in order to form the unique whole." Id.

The case of Big Vision Private Ltd. v. E.I. DuPont De Nemours & Co., 1 F.Supp.3d 224 (S.D.N.Y. 2014) adds nothing to the conversation, as it merely recites that a combination must evidence something unique and not publicly known. The specific distinctive features claimed by the plaintiff in Big Vision were found in existing patents and the plaintiff urged nothing more.

The case of Vital State Can. Ltd. v. Dream Pak, LLC, 303 F.Supp. 2d 516 (D.N.J. 2003) is so distinct on its facts as to be wholly unhelpful here. In that case, the parties were

collaborating and developing together for a period of time. A number of years later, one party sought to create a product purportedly using the trade secrets. Specific and individual trade secrets were identified in the suit, but then the plaintiff changed course, saying that the combination of the individual elements was its trade secret. The court found that the plaintiff needed to show each and every element of the combination was misappropriated. In any event, Caudill Seed's articulation of Trade Secret 1 defines its breadth and its boundaries. The evidence in the case is sufficient for a jury to reasonably find that Jarrow Formulas was afforded a turnkey operation through the misappropriation of the entirety of Trade Secret 1.

American Airlines, Inc. v. KLM Royal Dutch Airlines, Inc., 114 F.3d 108 (8th Cir. 1997) is also unhelpful in our case. There, the claimed trade secret was a combination of 5 demand forecasting elements implemented in certain algorithms and formulas for a seat pricing/category system for airlines. The evidence showed that KLM had only received four of the five elements and no algorithms or formulas for implementation from Northwest Airlines who had purportedly misappropriated the entire trade secret from American Airlines. SJ was therefore granted in favor of KLM. In the case at bar, the evidence supports a reasonable inference that Jarrow Formulas misappropriated Trade Secret 1 in its entirety.

B. Willful and Malicious Conduct

The parties agreed to the language utilized in the Special Interrogatory defining the phrase "willful and malicious." The court instructed the jury as follows:

Special Interrogatory - Willful and Malicious Conduct

You will only consider this instruction if you found misappropriation of one or more trade secrets on Verdict Form B.

You must determine from the evidence whether Caudill Seed has proven by clear and convincing evidence that Jarrow Formulas misappropriated one or more of Caudill Seed's trade secrets in a willful and malicious way. "Willful and malicious" means behavior motivated by spite or ill will and a disregard for the rights of another with knowledge of probable injury. Put another way, "willful and malicious" conduct is calculated, deliberate, and reprehensible. Since the claims in this case are directed solely against Jarrow Formulas, the motivation which you must assess under this instruction is only that of officers, employees, or agents of Jarrow Formulas, other than Kean Ashurst.

Jarrow Formulas contends that proof of actual malice is required under this instruction. It urges that there was no evidence that Jarrow Formulas was motivated by spite or ill will toward Caudill Seed or that it disregarded Caudill Seed's rights with knowledge of probable injury. Jarrow Formulas notes that spite and ill will are appropriate synonyms for malice. In addition to instructing that "willful and malicious" means behavior motivated by spite or ill will and a disregard for the rights of another with knowledge of probable injury, we also explained that "willful and malicious" conduct is calculated, deliberate, and reprehensible.

Under the KUTSA, "[i]f willful and malicious misappropriation exists," the court may award exemplary damages and a reasonable attorney's fee. KRS 365.884, 365.886. The KUTSA also states that "KRS 365.880 to 365.900 shall be applied and construed to effectuate its general purpose to make uniform the law with respect to the subject of KRS 365.880 to 365.900 among

states enacting it." KRS 365.894. Thus, while the court is required to apply Kentucky law in this diversity action, Kentucky's trade secret act directs us to harmonize our interpretation of the provisions of the act, to the extent possible, with that of other states.

There is no Kentucky case which defines willful and malicious conduct in the context of trade secret misappropriation. Caudill Seed cites to Huddleston v. Hughes, 843 S.W.2d 901992) and Collins v. Rocky Knob Assoc., 911 S.W.2d 608, 611 (Ky.App. 1995) for guidance, urging that only willful disregard for the consequences of one's actions is required to support the verdict finding willful and malicious misappropriation. Both Huddleston and Hughes involved the interpretation of a subsection of the Recreational Use Statute, KRS 411.190 which references "willful or malicious failure to guard or warn" against a dangerous condition, use, structure, or activity. Notably, the statute refers to "willful" and "malicious" in the disjunctive. We instructed the jury in the conjunctive.

In Huddleston, the court looked to the *Black's Law Dictionary* definition of "willful" which includes "premeditated; malicious; done with evil intent, or with a bad motive or purpose, or with indifference to the natural consequences; unlawful; without legal justification." Id. 1599 (6th ed. 1990). In assessing the nuances between these terms, the court stated:

Addressing punitive damages generally, the Supreme Court in Horton v. The Union Light, Heat & Power Co., Ky., 690 S.W.2d 382, 389 (1985), cites the Restatement (2d) of Torts § 908(2) (1979) and makes the following observation:

"[E]vil motive" and "reckless indifference to the rights of others" are considered as synonymous. * * * [N]egligence when gross has the same character of outrage justifying punitive damages as does willful and malicious misconduct in torts where the injury is intentionally inflicted. Just as malice need not be expressed and may be implied from outrageous conduct, so too may wanton or reckless disregard for the lives and safety of others be implied from the nature of the misconduct.

R.B. Tyler Co. v. Kinser, Ky., 346 S.W.2d 306, 308 (1961), holds that "malice is imputed where the wrongful act evidenced the entire want of care or great

indifference to the consequences and the rights of others." Black's Law Dictionary 956–957, similarly, acknowledges that the term "malice" need not be used exclusively to characterize a deliberate intent to do harm:

Malice in law is not necessarily personal hate or ill will, but it is that state of mind which is reckless of law and of the legal rights of the citizen.

Black's defines a "willful and malicious injury" as follows:

For such to exist there must be an intent to commit a wrong either through actual malice or from which malice will be implied. Such an injury does not necessarily involve hatred or ill will, as a state of mind, but arises from intentional wrong committed without just cause or excuse. * * * It may involve merely a willful disregard of what one knows to be his duty, an act which is against good morals and wrongful in and of itself, and which necessarily causes injury and is done intentionally.

Id. at 1600 (Citation omitted) (Emphasis supplied).

Huddleston By & Through Lynch v. Hughes, 843 S.W.2d 901, 905–06 (Ky. Ct. App. 1992).

In Collins v. Rocky Knob Assocs., Inc., 911 S.W.2d 608 (Ky. Ct. App. 1995), the court cited to the Supreme Court of Kentucky's decision in Kirschner v. Louisville Gas & Electric Co., Ky., 743 S.W.2d 840 (1988), noting that "when discussing the duty owed by a landowner to trespassers under another statute, the court interpreted "willful" as applying to "conduct which is still, at essence, negligent, rather than actually intended to do harm, but which is so far from a proper state of mind that it is treated in many respects as if it were so intended...." Id. at 842–843. "[T]he actor has intentionally done an act of an unreasonable character in disregard of a known or obvious risk that was so great as to make it highly probable that harm would follow, and which thus is usually accompanied by a conscious indifference to the consequences...." Id. at 611.

The question of the appropriate application of the jury instruction is not clearly answered by these cases, as they did not address misappropriation of trade secrets which is by definition a knowing and intentional act. Willful and malicious misappropriation clearly requires something more, but how that translates into reprehensible behavior in the trade secret context is not made clear by the Kentucky cases alone. As we are instructed to harmonize our interpretation of the KUTSA, where possible, with the rulings of other courts, we look to decisions from other jurisdictions for guidance. Although not binding on this court, we look to trade secret cases under other iterations of the UTSA and, to the extent consistent, pre-UTSA cases addressing this issue.

It is established that under Kentucky law, "malice" is not necessarily personal hatred or ill will, but rather may be found in a reckless indifference to the rights of others which is so egregious that malice is imputed. The act of misappropriation of trade secrets in itself can be an "[a]cquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means." KRS 365.880(2)(a). As this misappropriation requires knowledge of the wrongful procurement of the trade secret, the level of culpability required to justify an award of exemplary damages must necessarily be greater than a mere passive understanding of the wrongfulness of the activity and doing it anyway. The Huddleston and Collins cases hint at this in referencing conduct "so far from a proper state of mind," an act which is "against good morals, and wrongful in and of itself and which necessarily causes injury and is done intentionally." Collins, 911 S.W.2d at 611, Huddleston, 843 S.W.2d at 906.

Jarrow Formulas states that a mere motivation to compete for business does not rise to the level of malice. This point was made in Mattel, Inc. v. MGA Entertainment, Inc., 801 F.Supp.2d 950 (C.D.Ca. 2011), an UTSA case. There the court stated: "Because parties do not ordinarily expect that misdeeds that cause purely economic loss may expose them to severe exemplary penalties, economic misconduct is not generally reprehensible enough to support a

large award of exemplary damages. See Gore, 517 U.S. 577, 116 S.Ct. 1589. The exceptions, of course, are cases involving "affirmative acts of misconduct" marked not just by malice, but a breach of basic commercial ethics and fraud. Id. So entrenched is society's expectation that exemplary damages are proper in such cases that statutes, including the UTSA, routinely provide for recovery of exemplary damages in cases involving financial loss and put the public on notice of the bounds of such relief." Id. at 954. The court noted that Mattel's conduct "fell far short of basic ethical standards." Its senior management had consistently encouraged employees to use false pretenses to acquire competitive information including price lists, advertising plans, and new product attributes. It praised its employees for such actions and used trade secret information to preempt competitors' products. Ibid.

In E.I. DuPont de Nemours and Co. v. Kolon Industries, Inc., 911 F.Supp.2d 340 E.D.Va. 2012), also an UTSA case, the court explained that "maliciousness" under Virginia's iteration of the UTSA did not invoke a "species of malice" requiring an intent to injure. Rather, the court instructed the jury that "[a]n act is done 'maliciously' if prompted or accompanied by such gross indifference to the rights of others as will amount to a willful act without just cause or excuse." Id. at 343-44.

In the Sixth Circuit, the Court of Appeals, applying Ohio's general punitive damages statute in a trade secrets case, stated:

Ohio statutory law provides that punitive or exemplary damages may not be recovered in a tort action unless both of the following apply:

- (1) The actions or omission of that defendant demonstrate malice, aggravated or egregious fraud, or insult, or that defendant as principal or master authorized, participated in, or ratified actions or omissions of an agent or servant so demonstrate.
- (2) The trier of fact has returned a verdict or made a determination ... of the total compensatory damages recoverable by the plaintiff from that defendant.

Ohio Rev.Code Ann. § 2315.21(C)(1) & (2)(Anderson Supp.1996)...

Ohio courts have allowed punitive damages to be awarded in trade secret cases "where the evidence shows that the defendant acted willfully and intentionally and with malicious intent." Pyromatics v. Petruziello, 7 Ohio App.3d 131, 454 N.E.2d 588, 595 (Ohio App.1983). In Preston v. Murty, 32 Ohio St.3d 334, 512 N.E.2d 1174 (Ohio 1987)(syllabus), the Ohio Supreme Court stated the law on punitive damages:

We therefore hold that actual malice, necessary for an award of punitive damages, is (1) that state of mind under which a person's conduct is characterized by hatred, ill will or a spirit of revenge, or (2) a conscious disregard for the rights and safety of other persons that has a great probability of causing substantial harm.

Id. at 1176 [emphasis ours]. Actual malice can rarely be proven "otherwise than by conduct and surrounding circumstances." Villella v. Waikem Motors, Inc., 45 Ohio St.3d 36, 543 N.E.2d 464, 466-67 (1989), overruled on other grounds by, Moskovitz v. Mount Sinai Med. Ctr., 69 Ohio St.3d 638, 635 N.E.2d 331, (Ohio 1994) "[A]ctual malice can be inferred from conduct and surrounding circumstances which may be characterized as reckless, wanton, willful or gross." Id. at 467.

Macdermid Inc. v. Electrochemicals Inc., 142 F.3d 435, 1998 WL 165137 (6th Cir. March 31, 1998)(unpubl.). The Macdermid case, cited by Jarrow Formulas, supports a conclusion that actual malice may, under appropriate circumstances, be proven by such egregious conduct that ill will is inferred in a trade secret case.

The instruction given to the jury in this case includes the sentence that further amplifies the nature of the conduct which will rise to the level of willful and malicious misappropriation. "Willful and malicious" conduct "is calculated, deliberate, and reprehensible." That sentence is a derivation of language in Sperry Rand Corp. v. A-T-O, Inc. 447 F.2d 1387 4th Cir. 1971), a trade secrets case. The court in Sperry Rand affirmed the award of punitive damages against two former employees of Sperry Rand and their new employer, finding that the actions were "calculated, deliberate, and reprehensible" and that the individuals were both guilty of serious breaches of loyalty and responsibility to Sperry Rand, and that "the acts of the defendants were

willful and deliberate and were committed with the knowledge that they were unlawful and were calculated to result in substantial harm to the plaintiff." Id. at 1394. While Sperry Rand is a pre-UTSA case, its condemnation of breaches of loyalty and responsibility as reprehensible behavior has been cited in a number of decisions brought under the Virginia UTSA.²

Jarrow Formulas contends that there was no evidence offered that it was motivated by spite or ill will toward Caudill Seed or that it disregarded Caudill Seed's rights with knowledge of probable injury. We find that there was evidence adduced at trial from which a jury could reasonably conclude that Jarrow Formulas' misappropriation of Caudill Seed's Trade Secret 1 was willful and malicious. There was evidence from which a jury could reasonably find that Jarrow Formulas actively, deliberately, aggressively, and deceptively pursued Caudill Seed's trade secrets in order to "beat [Caudill Seed] to the punch" in getting an activated formula broccoli seed product to market. Secretive and underhanded tactics employed to capitalize on Caudill Seed's knowledge, designed to benefit Jarrow Formulas and necessarily to damage Caudill Seed as the flip side of that coin, could reasonably be found to constitute ill will. The evidence offered at trial established a two-way street for the exchange of information. Jarrow Formulas asked Ashurst to provide Caudill Seed's complete research file and agreed to compensate Ashurst for "delivering on the activated product." Jarrow Formulas contends that it was nothing more than healthy, honest competition, and that it had no interest in harming Caudill Seed. However, Jarrow Formulas was aware of Ashurst's confidentiality agreements with Caudill Seed yet agreed to pay him to "deliver on the activated formula." Vol. 2B (Ashurst), 68:5-7.

² See American Sales Corp. v. Adventure Travel, Inc., 862 F.Supp. 1476 (E.D.Va. 1994)(exemplary damage award rejected under the VUTSA); *Nat'l Legal Research Group v. Lathan*, Civ.No. 92-0031-C, 1993 WL 169789 (W.D.Va. May 17, 1993)(exemplary damage award upheld under VUTSA).

Dubose's testimony concerning a "courtesy call" he received from Caudill Seed regarding the impending availability for purchase of Caudill Seed's activated formula despite the "abrupt departure" of Ashurst evidences the surreptitious nature of Jarrow Formulas' communications and activities with Ashurst such that Caudill Seed had no idea that it was about to be beaten to market by its own customer. Dubose, DN 412, pp. 24-30. Similarly, Ashurst's secret trip from FONA to California, while still in the employ of Caudill Seed, to meet with Jarrow Formulas officials on the plan to bring an activated formula to market for Jarrow Formulas and "beat Caudill Seed to the punch" reasonably suggests deception. Dubose testified that Ashurst provided Jarrow Formulas the outline of steps in its process, admittedly not in the public domain, from Ashurst's "vast knowledge of years and years of experience." Id. at 24. Caudill testified that Ashurst was hired as an equipment engineer, and that all of his broccoli extract-related knowledge came from Caudill Seed. Further, the fact that Jarrow Formulas was up and running as a manufacturer in four months speaks volumes in support of Caudill's Seed's contention that Jarrow Formulas acquired and used Caudill Seed's research and development, know-how and processs in achieving this success at all costs. A jury could reasonably conclude that Jarrow Formulas committed willful and malicious misappropriation in this case.

C. Damages

Jarrow Formulas seeks judgment as a matter of law or a new trial with respect to the jury's award of \$2,023,000.00 in actual loss for misappropriation of Caudill Seed's Trade Secret

1. The jury also awarded \$404,605.00 reflecting profits from Jarrow Formulas' sales of glucorphanin and activated glucorphanin-containing products attained as a result of the

misappropriation. The \$404,605.00 award is the subject of different arguments for JMOL or new trial. We address those arguments separately.

What is important to note generally with regard to the damage award, however, is that the jury awarded only \$2,427,605.00 of the \$9,427,605.00 sought by Caudill Seed in compensation for the misappropriation of Caudill Seed's Trade Secret 1; that is, the value of its body of knowledge which was described to the jury and resulting profits attained as a result of the misappropriation. This is so, despite its separate verdicts that (1) Caudill Seed possessed trade secrets in the specific process for spray-drying myrosinase, vendor information, customer information, and the laboratory notebook and hard drive, and (2) that Jarrow Formulas misappropriated those trade secrets, with the exception of the lab notebook and hard drive. The jury's verdicts thus indicate that it found Caudill Seed's evidence established that Jarrow Formulas' misappropriation of Caudill Seed's research and development "seed to shelf" only had compensable value insofar as it enabled Jarrow Formulas to become a broccoli seed extract manufacturer and developer of a successful activated formula broccoli seed product in four months. Caudill Seed was thus entitled to a portion of the damages claimed which the jury determined from the evidence represented the value gained or money saved by Jarrow Formulas by not having to expend resources on research and development and the profits Jarrow Formulas derived from sales of products achieved through that jump start afforded to Jarrow Formulas. While Jarrow Formulas became a manufacturer with Caudill Seed's know-how, Caudill Seed spent months reconstructing its know-how, reaffirming its processes, and moving forward with production of its activated formula in the wake of Ashurst's resignation.

The jury was further instructed (1) not to "double count any aspect of Caudill Seed's damages claim," (2) to limit the amount awarded for sales of products utilizing Caudill Seed's

trade secrets to the amount of profit attributable to the misappropriated trade secret, and (3) not to exceed the period of time it would have taken Jarrow Formulas to obtain the misappropriated information on its own by proper means. DN 432, p. 11-12.

As the Court of Appeals for the Fifth Circuit aptly stated:

Our review of the caselaw [concerning damages to be awarded in a trade secrets case] leads us to the conclusion that every case requires a flexible and imaginative approach to the problem of damages. We agree with the Court of Appeals for the Sixth Circuit that 'each case is controlled by its own peculiar facts and circumstances,' Enterprise Manufacturing Co. v. Shakespeare Co., 141 F.2d 916, 920 (6th Cir. 1944), and accordingly we believe that the cases reveal that most courts adjust the measure of damages to accord with the commercial setting of the injury, the likely future consequences of the misappropriation, and the nature and extent of the use the defendant put the trade secret to after misappropriation. Naturally in some cases the damages will be subject to exact measurement, either because the parties had previously agreed on a licensing price as in Vitro Corp. v. Hall Chemical Co., supra, or because some industry standard provides a clear measure [footnote omitted]. Where the damages are uncertain, however, we do not feel that that uncertainty should preclude recovery; the plaintiff should be afforded every opportunity to prove damages once the misappropriation is shown.

Univ. Computing Co. v. Lykes-Youngstown Corp., 504 F.2d 518, 538–39 (5th Cir. 1974).³ Stated more simply, "the plaintiff "bear[s] the burden of proving damages and may not recover if their entitlement to damages is based upon speculation or conjecture," however, "once a plaintiff establishes a right to damages, that right will not be denied because damages cannot be calculated with mathematical certainty." Allied Erecting and Dismantling Co., Inc. v. Genesis *Equipment & Mf'g, Inc.*, 511 Fed.App'x., 398, 401 (6th Cir. 2013). Further, "[a]s ordinarily defined, the concept of unjust enrichment includes not only loss on one side but gain on the other, with a tie of causation between them." Id. (quoting BFI Waste Systems of Ohio, Inc. v.

³ While this is a pre-UTSA case, it has been cited by Jarrow Formulas as authority and has been cited in other cases brought under UTSA statutes. The University Computing case has been mentioned over 1,200 times, cited in 196 cases since it was decided, and as recently as April of 2020. It has been afforded negative treatment in 11 cases.

Prof'l Constr. & Safety Servs., Inc., No. 06CA0008972, 2008 WL 834428, at *2 (Ohio Ct. App. 2008)).

Jarrow Formulas argues that Caudill Seed cannot recover costs of development,⁴ awarded by the jury under the heading of actual costs, because "total research and development costs can only be awarded for total loss of trade secret value caused by the alleged misappropriation of Caudill Seed's hard drive and lab notebook. The jury found that Jarrow Formulas did **not** misappropriate the hard drive and notebook containing 'the most important part of [the] research and development." DN 492-1, p. 32.

The jury found that two tangible items, the laboratory notebook and hard drive, which were the principal physical repositories of Caudill Seed's formulas and processes, constituted a trade secret, but were not found to have been misappropriated by Jarrow Formulas. Jarrow Formulas repeatedly recites these verdicts as sounding the death knell for the jury's verdict of misappropriation of Trade Secret 1. We find Jarrow Formulas' theory flawed.

Specifically, Caudill Seed described Trade Secret 6 as "A hard drive and laboratory notebook containing specific formulations and process parameters (including Trade Secret No. 3, previously described) for broccoli products, and significant amounts, if not all, of Trade Secret No. 1 (previously described)(including all of its internal research, testing data and at least portions of Caudill Seed's compilation of publicly available research)." Thus to find misappropriation of Trade Secret 6, the jury would have had to find from the evidence that these tangible items containing intangible information were misappropriated. The fact that Jarrow Formulas was not found to have misappropriated Trade Secret 6 does not preclude a finding that Jarrow Formulas misappropriated the intangible information contained therein as referenced in

⁴ The jury awarded \$2,023,000.00 in "actual losses." Caudill Seed sought \$830,206.00 in lost profits and \$4,535,793.00 in research and development costs. The jury's award does not specify the components, but at least a portion of the award reflects losses for costs of development.

Trade Secret 1. According to Caudill, the lab notebook and hard drive contained the most important part, the heart of Caudill Seed's research and development. He noted that to protect its trade secrets, it did not want the information recorded in numerous places. However, this evidence does not support Jarrow Formulas' inferential leap Caudill Seed's trade secrets did not exist anywhere else than the lab notebook and hard drive. Thus we conclude that the jury's verdict as to Trade Secret 6 does not ipso facto preclude a finding that Jarrow Formulas misappropriated Trade Secret 1.

Additionally, we reject Jarrow Formulas argument that because the jury did not find that the provisional patent, Trade Secret 3, was itself a trade secret, the jury could not find that the whole of Trade Secret 1 was misappropriated. As part of the protectable body of knowledge that is Trade Secret 1, the provisional patent need not be independently worthy of trade secret protection. Jarrow Formulas contends that it cannot be held accountable Caudill Seed's loss of use of Trade Secret 1 because the jury did not find that it misappropriated the laboratory notebook and hard drive. Jarrow Formulas argued, but the jury apparently rejected, that Caudill Seed's damages were solely the result of disarray occasioned by the disappearance of the lab notebook and hard drive. Because misappropriation of the lab notebook and hard drive is not a prerequisite to finding misappropriation of Trade Secret 1, Jarrow Formulas' argument for rejection of cost of development damages on this basis is rejected.

Jarrow Formulas cites Stewart Title Co. v. First American Title Ins. Co., 44 F.Supp.2d 942 (W.D.Tenn. 1999) for the proposition that, as [the defendant] did not destroy the value of the [misappropriated trade secret] by its improper use, the Court finds it inappropriate to consider awarding Plaintiffs the total value of the [trade secret] or its development costs. See Softel, Inc. v. Dragon Med. and Scientific Communications., Inc., 118 F.3d 955, 969 (2d Cir.1997)." Id at 956.

But the jury did not award Caudill Seed all of the development costs. We find that under the circumstances of this case and the evidence adduced, it was reasonable for the jury to find the value of the benefit to Jarrow Formulas in misappropriating Trade Secret 1 to be, in part, measured as a portion of Caudill Seed's development costs.

Comment c to the Restatement (Third) Unfair Competition states:

c. Relationship of legal and equitable remedies. The rules governing the award of monetary relief for the appropriation of a trade secret derive from both legal and equitable principles. Cf. § 36, Comment b. The traditional measure of damages awards relief measured by the loss to the plaintiff resulting from the appropriation. The nature of a competitive marketplace, however, often makes it difficult for a plaintiff to prove lost sales or other losses attributable to the appropriation of a trade secret. Similarly, the value of a trade secret that has been destroyed through public disclosure is often speculative. The remedy of restitution is thus an important form of monetary relief in trade secret cases. The restitution remedy awards to the plaintiff the enrichment unjustly acquired by the defendant as a result of the appropriation of the plaintiff's trade secret. In some situations, the defendant's enrichment is represented by profits from sales made possible by the appropriation; in others, by savings achieved through the use of the trade secret in the defendant's business. In some cases, the measure of the plaintiff's compensatory damages and the measure of the defendant's unjust enrichment may converge. For example, relief based on the defendant's profits on sales can measure either the gain derived by the defendant or the loss to the plaintiff from diverted business. Similarly, relief based on a reasonable royalty for the defendant's use may measure either the defendant's savings or the plaintiffs lost revenue. Thus, many cases do not maintain a sharp distinction between compensatory and restitutionary remedies.

Thus, we find that it is the propriety of the award based upon the particular evidence in the case which should control, not the column under which the award may be place.

Jarrow Formulas contends the jury could not reasonably find that Caudill Seed's losses were attributable to the misappropriation of its trade secrets. Jarrow Formulas urges that Caudill Seed engages in "circular logic" insofar as the damages expert and Dan Caudill deferred to each other's testimony at trial. Damages expert, William Wingate, testified that the "causal link" between the research and development expenses and the trade secrets was a matter for Caudill

Seed representatives to present to the jury. 10A (Wingate), 30:13-14. Caudill testified when asked for a general estimate as to the amount of money Caudill Seed spent on research and development over the years that it spent many millions of dollars, he deferred to Wingate, but thought the sum was \$4.5M.

Jarrow Formulas cites the case of United Services Automobile Assoc. v. Mitek Systems, Inc., No. SA-12-CA-282, 2014 WL 12498207 (W.D.Tex. Jul. 22, 2014)(unpubl.), urging that the Wingate's testimony was deficient. Mitek Systems is a case addressed to the admissibility of certain expert testimony. Admissibility under Daubert is not the issue presently before this court. Wingate's testimony was permitted over Jarrow Formulas' Daubert objection. The court noted that "Wingate's opinion must have an analytical "fit" with the facts. Daubert, 509 U.S. at 591. However, a damages expert is not required to examine every scintilla of evidence in the case to determine whether the underlying misconduct occurred. Instead, he is entitled to rely on the factual assertions of counsel and the corporate representatives in preparing a damages tabulation. KCH Servs., Inc. v. Vanaire, Inc., No. 05-777-C, 2010 WL 1416672, at *2 (W.D. Ky. March 31, 2010) (recognizing that professional standards "permit the expert to rely on 'facts or assumptions' provided by the party seeking to offer the expert's opinion.") (citation omitted)."

Further, in Mitek Systems, the plaintiff had provided the expert a spreadsheet listing "projects" he believed were related to development of the trade secret and a figure for the project cost. The expert merely added the column of numbers. The court found that the proposed expert testimony would not help the jury to understand the evidence or determine any fact in issue and so excluded it. The court did not opine concerning acceptable or required methods of proof. Rather the court simply noted that the expert's testimony would not provide any "helpful

guidance for the factfinder" insofar as he relied entirely on the spreadsheet provided to him and conducted no independent analysis. Id. at *1.

We find that there was sufficient evidence for the jury to reasonably conclude that the claimed costs of development were attributable to Jarrow Formulas' misappropriation of Trade Secret 1. First, there is nothing unusual or improper about a certified public accountant relying on documentation provided by a corporate client such as tax returns, receipts, invoices and the like, in determining damages. Caudill discussed Caudill's Seed's research and development costs and the body of knowledge developed by and with Ashurst for Caudill Seed which led to the development of Caudill Seed's products. Vol. 2 (Caudill) pp. 17-23. There was sufficient evidence from which the jury could reasonably conclude that this was the same body of knowledge misappropriated by Jarrow Formulas in order to jump start its manufacturing process. The underlying documentation of costs of development was provided for the jury to review in addition to Wingate's analysis. PX 217. Caudill testified that he and Ashurst headed the research and development work with respect to broccoli products. Ashurst testified that all of his efforts related to broccoli products and that he "helped develop a defatted broccoli seed extract from seed meal." Vol. 1, 5:6-9. Thus Caudill Seed adduced evidence upon which the jury could reasonably conclude that the costs of development were related to Caudill Seed's Trade Secret 1. Therefore, Jarrow Formulas' challenge to the jury award on this basis is rejected.

In addition to an award of damages derived from Caudill Seed's costs of development evidence, the jury awarded Caudill Seed \$404,603.00 based upon Wingate's calculations concerning Jarrow Formulas' net profit on four of its products containing either glucoraphanin or activated glucoraphanin. These four products brought to market by Jarrow Formulas had a glucoraphanin component which had not been researched, developed or produced by Jarrow

Formulas before the 2011 misappropriation of Caudill Seed's Trade Secret 1. The jury awarded Caudill Seed the full \$404,603.00 in net profits earned by Jarrow Formulas on these products.

The jury was instructed that "Caudill Seed may recover damages for trade secret misappropriation only for the period in which information is entitled to protection as a trade secret plus an additional period, if any, in which Jarrow Formulas retained an advantage over good faith competitors because of the misappropriation. This period may be measured by the time it would have taken Jarrow Formulas to obtain the information by proper means such as researching publications, reverse engineering, or independent development." DN 443, pp. 11-12.

Caudill Seed contends that it established through Jarrow Formula's own financial documents that it "continued to earn increasing profits on its glucoraphanin containing products, which provided [the jury] a reasonable basis for inferring that it continued to maintain a competitive advantage over good faith competitors." DN 503, p. 28. It denies that it had any obligation to further offer theoretical evidence that Jarrow Formulas could or would have independently developed its product and process in the absence of its misappropriation from Caudill Seed. Jarrow contends, however, that the court's instruction required Caudill Seed to adduce such proof. The court concludes that Caudill Seed was not required, under the circumstances of this case and in light of the damages sought, to adduce such evidence, and we find that the jury verdict is not infirm for lack of such proof.

Caudill Seed offered evidence from which a reasonable jury could conclude that Jarrow Formula's misappropriation of Trade Secret 1 enabled it to develop its process and products in four months' time. In the absence of evidence to establish Jarrow Formula's ability to achieve these successes in a given period of time, the profits gained by Jarrow Formulas remains profits gained by its unfair advantage. Jarrow Formulas contended that it did not acquire or use Caudill

Seed's Trade Secret 1. The jury found otherwise. Ashurst testified that Caudill Seed's Trade Secret 1 is not "rocket science" Vol. 2B (Ashurst) 66:1-2 and Jarrow Formulas was up and running as a glucoraphanin manufacturer and innovating an activated formula in just a couple of months. However, the jury found misappropriation, not innovation, by Jarrow Formulas. There was sufficient evidence for it to so find.

Jarrow Formulas recites testimony from Wingate on cross-examination in which he affirmed that he was asked in his initial report to assume a conservative two-year "competitive advantage period" in calculating damages. PX 204, Ex. 3, nt. 3. Jarrow Formulas touts this as record evidence of the appropriate limitation to a two-year head start period and concludes the jury's award of damages beyond two years is speculative. This argument is a red herring. Caudill Seed requested Wingate to perform a damages analysis early on in the case based upon this hypothetical assumption. Wingate testified that if Jarrow Formulas could have succeeded in achieving its goals independently in two years, any damages awarded after that point in time would have been unjust. However, there was simply no evidence at trial establishing that Jarrow Formulas could have succeeded independently in two years.

Jarrow cites to the Official Commentary to the Restatement (Third) of Competition the principles of which the court included in its damages instruction and Structural Dynamics Research Corp. v. Engineering Mechanics Research Corp., 401 F.Supp 1102 (E.D.Mich. 1995) for its contention that Caudill Seed was required to prove how long it would have taken Jarrow Formulas to do its own independent work. The plaintiff in Structural Dynamics presented testimony concerning the period of time necessary for a competitor to duplicate the program in issue by independent research for purposes of establishing a reasonable royalty, a theory of recovery not in issue in this case. Id. at 1120.

As there was no evidence establishing a period of time it would have taken Jarrow Formulas to independently succeed in its achievements, we reject the defendant's assertion that the jury's award of damages was speculative.

Finally, the court rejects Jarrow Formula's argument that the verdict must be vacated on the ground that the jury was required to determine what percentage of Jarrow Formula's profits corresponded to the percentage of each product which was attributable to the misappropriation of Caudill Seed's trade secret. Jarrow Formula thus urges that since glucoraphanin or activated glucoraphanin is merely a component of its supplements, the jury erred in awarding 100% of the profits for its sales.

Specifically, the jury was instructed that

When considering the profits that Jarrow Formulas derived from sales of products utilizing Caudill Seed's trade secret(s), you must consider the amount of the profit attributable to the misappropriated trade secret(s) of Caudill Seed and the amount, if any, attributable to other features and apportion damages accordingly, to the extent that such apportionment is supported by the evidence.

DN 432, p. 11.

Despite Jarrow Formulas' argument to the contrary, there was sufficient evidence adduced to support a conclusion that Jarrow Formulas would not have sold the products that it did without the misappropriation. Jarrow Formulas asserted that it could have obtained glucoraphanin powder elsewhere, but the fact remains that it did not, and Caudill Seed is entitled to be compensated for the profits for products sold as a result of the component thus wrongfully obtained. Jarrow Formulas offered evidence that the glucoraphanin or activated glucoraphanin was only one component of the BroccoMax, Liver Optimizer, Selenium Synergy, and Green Defense Detox products. There was no suggestion, however, that the value of any one component could be said to drive the sale. The Reporter's Notes to § 45 of the Restatement

(Third) Unfair Competition state that "[t]he plaintiff bears the burden of establishing sales; the

defendant has the burden of establishing deductible expenses and any sales not attributable to the

use of the trade secret." E.g., USM Corp. v. Marson Fastener Corp., 392 Mass. 334, 467 N.E.2d

1271 (1984); Julius Hyman & Co, supra. Further, both Ashurst and Dubose testified that vertical

integration of Jarrow Formulas' operations to produce of its own raw materials would increase

profits. 2B (Ashurst), 67:4-8; 16-22. Thus there was evidence to reasonably support a finding

that Jarrow Formulas would not have derived the profit it did without the misappropriation of

Trade Secret 1.

Conclusion

For the reasons set forth herein, the motion of Jarrow Formulas, Inc. for judgment as a

matter of law or new trial (DN 492) will be denied and the court will affirm the award of

compensatory damages in the sum determined by the jury. A separate order will be entered this

date in accordance with this opinion.

IT IS SO ORDERED.

June 9, 2020

Charles R. Simpson III, Senior Judge

United States District Court

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