Trade Secret

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Trade Secret

Trade secret law protects against the theft of valuable business secrets. Doctrinally, trade secret law has deep common-law roots as a branch of "unfair competition" law. Over time it has become more statutory and more federal. The Uniform Trade Secrets Act has been adopted in some form by 47 states. The federal Economic Espionage Act criminalized an important subset of trade secret misappropriation, and the 2016 Defend Trade Secrets Act added a federal civil cause of action and an important seizure remedy.

The leading trade secret treatises are Roger M. Milgrim & Eric Bensen, Milgrim on Trade Secrets (Matthew Bender, on Lexis), Louis Altman & Malla Pollack, Callmann on Unfair Competition, Trademarks, and Monopolies (Thomson West, on Westlaw), and Melvin F. Jager, Trade Secrets Law (Thomson West, on Westlaw). The older Restatement (First) of Torts and the newer Restatement (Third) of Unfair Competition are regularly cited.

Why protect trade secrets? At least three stories rub elbows in the cases and commentary.

- **Property**: keeping secrets safe gives companies incentives to invest in creating valuable information in the first place.
- **Arms Race**: unless trade secrets received legal protection, companies would inefficiently overinvest in self-help to protect them, and other companies would inefficiently overinvest in stealing them.
- **Competition**: trade secret law deters unethical business practices and encourages companies to compete with each other fairly.

A Subject Matter

Uniform Trade Secrets Act

§ 1
Definitions

(4) "Trade secret" means information, including a formula, pattern, compilation, program, device, method, technique, or process, that:

(i) 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

(ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

Restatement (Third) of Unfair Competition

§ 39
Definition of Trade Secret

A trade secret is any information that can be used in the operation of a business or other enterprise and that is sufficiently valuable and secret to afford an actual or potential economic advantage over others.

1 Secrecy

It is clear, uncontroversial, and unsurprising that the essential requirement for having a trade secret is actual secrecy: the information must not be widely known. The concept is not complicated, but it is subtle. "Secrecy" is something of a term of art; whether something is considered secret as a factual matter depends heavily on what kinds of observation and disclosure trade secret law will protect against.

Most of this chapter is devoted to helping you understand this sentence.

312 F.3d 263 (7th Cir. 2002)

United States v. Lange

Matthew Lange has been convicted of violating 18 U.S.C. § 1832, part of the Economic Espionage Act of 1996. This statute makes it a felony to sell, disseminate, or otherwise deal in trade secrets, or attempt to do so, without the owner's consent. Lange stole computer data from Replacement Aircraft Parts Co. (RAPCO), his former employer, and attempted to sell the data to one of RAPCO's competitors. He allows that his acts violated § 1832, if the data contained "trade secrets," but denies that the data met the statutory definition [that the] "information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, the public."

18 U.S.C. § 1839

RAPCO is in the business of making aircraft parts for the aftermarket. It buys original equipment parts, then disassembles them to identify (and measure) each component. This initial step of reverse engineering, usually performed by a drafter such as Lange, produces a set of measurements and drawings. Because this case involves an effort to sell the intellectual property used to make a brake assembly, we use brakes as an illustration.

Knowing exactly what a brake assembly looks like does not enable RAPCO to make a copy. It must figure out how to make a substitute with the same (or better) technical specifications. Aftermarket manufacturers must experiment with different alloys and compositions until they achieve a process and product that fulfils requirements set by

the Federal Aviation Administration for each brake assembly. Completed assemblies must be exhaustively tested to demonstrate, to the FAA's satisfaction, that all requirements have been met; only then does the FAA certify the part for sale. For brakes this entails 100 destructive tests on prototypes, bringing a spinning 60-ton wheel to a halt at a specified deceleration measured by a dynamometer. Further testing of finished assemblies is required. It takes RAPCO a year or two to design, and obtain approval for, a complex part; the dynamometer testing alone can cost $75,000. But the process of experimenting and testing can be avoided if the manufacturer demonstrates that its parts are identical (in composition and manufacturing processes) to parts that have already been certified. What Lange, a disgruntled former employee, offered for sale was all the information required to obtain certification of several components as identical to parts for which RAPCO held certification. Lange included with the package – which he offered via the Internet to anyone willing to pay his price of $100,000 – a pirated copy of AutoCAD, the computer-assisted drawing software that RAPCO uses to maintain its drawings and specifications data. One person to whom Lange tried to peddle the data informed RAPCO, which turned to the FBI. Lange was arrested following taped negotiations that supply all the evidence necessary for conviction – if the data satisfy the statutory definition of trade secrets.

According to Lange, all data obtained by reverse engineering some other product are "readily ascertainable ... by the public" because everyone can do what RAPCO did: buy an original part, disassemble and measure it, and make a copy. The prosecutor responds to this contention by observing that "the public" is unable to reverse engineer an aircraft brake assembly.

The prosecutor's assumption is that the statutory reference in § 1839(3) to "the public" means the general public – the man in the street. Ordinary people don't have AutoCAD and 60-ton flywheels ready to hand. But is the general public the right benchmark?

A problem with using the general public as the reference group for identifying a trade secret is that many things unknown to the public at large are well known to engineers, scientists, and others whose intellectual property the Economic Espionage Act was enacted to protect. This makes the general public a poor benchmark for separating commercially valuable secrets from obscure (but generally known) information. Suppose that Lange had offered to sell Avogadro's number for $1. Avogadro's number, 6.02×10^{23}, is the number of molecules per mole of gas. It is an important constant, known to chemists since 1909 but not to the general public (or even to all recent graduates of a chemistry class). We can't believe that Avogadro's number could be called a trade secret. Other principles are known without being com-

prehended. Most people know that $E = mc^2$, but a pop quiz of the general public would reveal that they do not understand what this means or how it can be used productively.

One might respond that the context of the word "public" addresses this concern. The full text of § 1839(3)(B) is: "the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, the public". Avogadro's number and other obscure knowledge is not "generally known to" the man in the street but might be deemed "readily ascertainable to" this hypothetical person. It appears in any number of scientific handbooks. Similarly one can visit a library and read Einstein's own discussion of his famous equation. Members of the general public can ascertain even abstruse information, such as Schrodinger's quantum field equation, by consulting people in the know – as high school dropouts can take advantage of obscure legal rules by hiring lawyers.

Section 1839(3)(B) as a whole refers to the source of economic value – that the information is not known to or easily discoverable by persons who could use it productively. And for purposes of this case those people would be engineers and manufacturers of aircraft parts, who have ample means to reverse engineer their competitors' products. It is by keeping secrets from its rivals that RAPCO captures the returns of its design and testing work. Thus it is unnecessary here to decide whether "general" belongs in front of "public" – for even if it does, the economically valuable information is not "readily ascertainable" to the general public, the educated public, the economically relevant public, or any sensible proxy for these groups.

Lange wants us to proceed as if all he tried to sell were measurements that anyone could have taken with calipers after disassembling an original-equipment part. Such measurements could not be called trade secrets if, as Lange asserts, the assemblies in question were easy to take apart and measure. But no one would have paid $100,000 for metes and bounds, while Lange told his customers that the data on offer were worth more than that asking price. Which they were. What Lange had, and tried to sell, were the completed specifications and engineering diagrams that reflected all the work completed after the measurements had been taken: the metallurgical data, details of the sintering, the results of the tests, the plans needed to produce the finished goods, everything required to get FAA certification of a part supposedly identical to one that had been approved. Those details "derived independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, the public." Every firm other than the original equipment manufacturer and RAPCO had to pay dearly to devise, test, and win approval of similar parts; the details unknown to

the rivals, and not discoverable with tape measures, had considerable "independent economic value … from not being generally known". A sensible trier of fact could determine that Lange tried to sell trade secrets. It was his customer's cooperation with the FBI, and not public access to the data, that prevented closing of the sale.

Learning Curve Toys, Inc. v. PlayWood Toys, Inc.

342 F. 3d 714 (7th Cir. 2003)

765 ILCS 1065/1 *et seq.*

PlayWood Toys, Inc. ("PlayWood") obtained a jury verdict against Learning Curve Toys, Inc. and its representatives, Roy Wilson, Harry Abraham and John Lee (collectively, "Learning Curve"), for misappropriation of a trade secret in a realistic looking and sounding toy railroad track under the Illinois Trade Secrets Act

I. Background

In 1992, Robert Clausi and his brother-in-law, Scott Moore, began creating prototypes of wooden toys under the name PlayWood Toys, Inc., a Canadian corporation. Clausi was the sole toy designer and Moore was the sole officer and director of PlayWood. Neither Clausi nor Moore had prior experience in the toy industry, but Clausi had "always been a bit of a doodler and designer," and the two men desired to "create high-quality hardwood maple toys for the independent toy market." As a newly formed corporation, PlayWood did not own a facility in which it could produce toys. Instead, it worked in conjunction with Mario Borsato, who owned a wood-working facility. Subject to a written confidentiality agreement with PlayWood, Borsato manufactured prototypes for PlayWood based on Clausi's design specifications.

PlayWood's first attempt to market publicly its toys was at the Toronto Toy Fair on January 31, 1992. PlayWood received favorable reviews from many of the toy retailers in attendance; PlayWood also learned that the best way to get recognition for its toys was to attend the New York Toy Fair ("Toy Fair") the following month. Based on this information, Clausi and Moore secured a position at the Toy Fair in order to display PlayWood's prototypes. It was during this Toy Fair that Clausi and Moore first encountered Learning Curve representatives Roy Wilson, Harry Abraham and John Lee.

On the morning of February 12, 1993, the first day of the Toy Fair, Roy Wilson stopped at PlayWood's booth and engaged Clausi and Moore in conversation. Wilson identified himself as Learning Curve's toy designer and explained that his company had a license from the Britt Allcroft Company to develop Thomas the Tank Engine & Friends™ (hereinafter "Thomas") trains and accessories. Wilson commented that he was impressed with the look and quality of PlayWood's prototypes and raised the possibility of working together under a custom manufacturing contract to produce Learning Curve's

line of Thomas products. Clausi and Moore responded that such an arrangement would be of great interest to PlayWood. Later that same day, Harry Abraham, Learning Curve's vice president, and John Lee, Learning Curve's president, also stopped by PlayWood's booth. They too commented on the quality of PlayWood's prototypes and indicated that PlayWood might be a good candidate for a manufacturing contract with Learning Curve.

Clausi and Moore continued to have discussions with Learning Curve's representatives over the remaining days of the Toy Fair, which ended on February 14. During these discussions, Lee indicated that he would like two of his people, Abraham and Wilson, to visit PlayWood in Toronto the day after the Toy Fair ended in order to determine whether the two parties could work out a manufacturing arrangement for some or all of Learning Curve's wooden toys.

On February 18, 1993, Abraham and Wilson visited PlayWood in Toronto as planned. The meeting began with a tour of Borsato's woodworking facility, where the prototypes on display at the Toy Fair had been made. After the tour, the parties went to the conference room at Borsato's facility. At this point, according to Clausi and Moore, the parties agreed to make their ensuing discussion confidential. Clausi testified:

> After we sat down in the board room, Harry [Abraham of Learning Curve] immediately said: "Look, we're going to disclose confidential information to you guys, and we're going to disclose some designs that Roy [Wilson of Learning Curve] has that are pretty confidential. If Brio were to get their hands on them, then we wouldn't like that. And we're going to do it under the basis of a confidential understanding."
>
> And I said: "I also have some things, some ideas on how to produce the track and produce the trains now that I've had a chance to look at them for the last couple of days, and I think they're confidential as well. So if we're both okay with that, we should continue." So we did.

Moore testified to the existence of a similar conversation:

> It was at this point that Harry Abraham told us that they were going to disclose some confidential documents, drawings, pricing, margins, and asked us if we would keep that information confidential. ...
>
> I believe it was Robert [Clausi] who said that, you know, absolutely, we would keep it confidential. In fact, we had some ideas that we felt would be confidential we

> would be disclosing to them, and would they keep it, you know, confidential? Would they reciprocate? And Harry [Abraham] said: "Absolutely." And then we proceeded to go along with the meeting.

Immediately after the parties agreed to keep their discussion confidential, Wilson, at Abraham's direction, showed Clausi and Moore drawings of various Thomas characters and provided information on the projected volume of each of the products. Clausi testified that he considered the documents disclosed by Learning Curve during the meeting confidential because they included information on products not yet released to the public, as well as Learning Curve's projected volumes, costs and profit margins for various products.

The parties' discussion eventually moved away from train production and focused on track design. Wilson showed Clausi and Moore drawings of Learning Curve's track and provided samples of their current product. At this point, Abraham confided to Clausi and Moore that track had posed "a bit of a problem for Learning Curve." Abraham explained that sales were terrific for Learning Curve's Thomas trains, but that sales were abysmal for its track. Abraham attributed the lack of sales to the fact that Learning Curve's track was virtually identical to that of its competitor, Brio, which had the lion's share of the track market. Because there was "no differentiation" between the two brands of track, Learning Curve's track was not even displayed in many of the toy stores that carried Learning Curve's products. Learning Curve had worked unsuccessfully for several months attempting to differentiate its track from that of Brio.

After detailing the problems with Learning Curve's existing track, Abraham inquired of Clausi whether "there was a way to differentiate" its track from Brio's track. Clausi immediately responded that he "had had a chance to look at the track and get a feel for it [over] the last few days" and that his "thoughts were that if the track were more realistic and more functional, that kids would enjoy playing with it more and it would give the retailer a reason to carry the product, especially if it looked different than the Brio track." Clausi further explained that, if the track "made noise and [] looked like real train tracks, that the stores wouldn't have any problem, and the Thomas the Tank line, product line would have [] its own different track" and could "effectively compete with Brio." Abraham and Wilson indicated that they were "intrigued" by Clausi's idea and asked him what he meant by "making noise."

Clausi decided to show Abraham and Wilson exactly what he meant. Clausi took a piece of Learning Curve's existing track from the table, drew some lines across the track (about every three-quarters of an inch), and stated: "We can go ahead and machine

grooves right across the upper section, which would look like railway tracks, and down below machine little indentations as well so that it would look more like or sound more like real track. You would roll along and bumpity-bumpity as you go along." Clausi then called Borsato into the conference room and asked him to cut grooves into the wood "about a quarter of an inch deep from the top surface." Borsato left the room, complied with Clausi's request, and returned with the cut track three or four minutes later. Clausi ran a train back and forth over the cut piece of track. The track looked more realistic than before, but it did not make noise because the grooves were not deep enough. Accordingly, Clausi instructed Borsato to cut the grooves "just a little bit deeper so that they go through the rails." Borsato complied with Clausi's request once again and returned a few minutes later with the cut piece of track. Clausi proceeded to run a train back and forth over the track. This time the track made a "clickety-clack" sound, but the train did not run smoothly over the track because the grooves were cut "a little bit too deep." Based on the sound produced by the track, Clausi told Abraham and Moore that if PlayWood procured a contract with Learning Curve to produce the track, they could call it "Clickety-Clack Track."

Both Abraham and Wilson indicated that Clausi's concept of cutting grooves into the track to produce a clacking sound was a novel concept. Thereafter, Wilson and Clausi began to discuss how they could improve the idea to make the train run more smoothly on the track, but Abraham interrupted them and stated: "No, focus. You guys have to get the contract for the basic product first, and then we can talk about new products, because it takes [our licensor] a long time to approve new products and new designs."

The meeting ended shortly thereafter without further discussion about Clausi's concept for the noise-producing track. Before he left, Wilson asked Clausi if he could take the piece of track that Borsato had cut with him while the parties continued their discussions. Clausi gave Wilson the piece of track without hesitation. The piece of track was the only item that Abraham and Wilson took from the meeting. Clausi and Moore did not ask Wilson for a receipt for the cut track, nor did they seek a written confidentiality agreement to protect PlayWood's alleged trade secret. After the meeting, Clausi amended PlayWood's confidentiality agreement with Borsato to ensure that materials discussed during the meeting would remain confidential. Clausi also stamped many of the documents that he received from Learning Curve during the meeting as confidential because they included information on products not yet released to the public. PlayWood never disclosed the contents of Learning Curve's documents to anyone.

During March of 1993, PlayWood and Learning Curve met on

three separate occasions to discuss further the possibility of PlayWood manufacturing Learning Curve's Thomas products. At one of the meetings, and at Learning Curve's request, PlayWood submitted a manufacturing proposal for the Thomas products. Learning Curve rejected PlayWood's proposal. Learning Curve told Clausi that its licensor wanted the Thomas products to be made in the United States.

Thereafter, PlayWood had no contact with Learning Curve until late October of 1993, when Abraham contacted Clausi to discuss another possible manufacturing contract because Learning Curve's secondary supplier was not providing enough product. Again, PlayWood submitted a manufacturing proposal at Learning Curve's request, but it too was rejected. Learning Curve later stated that its new business partner had decided to manufacture the product in China.

Clausi and Moore continued to work on PlayWood's toy concepts. After the 1994 New York Toy Fair, which was not particularly successful for PlayWood, Clausi and Moore began to focus their efforts on refining PlayWood's concept for the noise-producing track. During this time, Clausi and Moore made no attempt to license or sell the concept to other toy companies because they believed that PlayWood still had "an opportunity to get in the door" with Learning Curve if they could perfect the concept and also because they believed that they were bound by a confidentiality agreement.

In December of 1994, while shopping for additional track with which to experiment, Moore discovered that Learning Curve was selling noise-producing track under the name "Clickety-Clack Track." Like the piece of track that Clausi had Borsato cut during PlayWood's February 18, 1993, meeting with Learning Curve, Clickety-Clack Track™ has parallel grooves cut into the wood, which cause a "clacking" sound as train wheels roll over the grooves. Learning Curve was promoting the new track as

> the first significant innovation in track design since the inception of wooden train systems.... It is quite simply the newest and most exciting development to come along recently in the wooden train industry, and it's sure to cause a sensation in the marketplace.... [I]t brings that sound and feel of the real thing to a child's world of make-believe without bells, whistles, electronic sound chips or moving parts.

PlayWood promptly wrote a cease and desist letter to Learning Curve. The letter accused Learning Curve of stealing PlayWood's concept for the noise-producing track that it disclosed to Learning Curve "in confidence in the context of a manufacturing proposal." Learning Curve responded by seeking a declaratory judgment that it owned the concept.

U.S. Pat. No. 5,454,513

Previously, on March 16, 1994, Learning Curve had applied for a patent on the noise-producing track. The patent, which was obtained on October 3, 1995, claims the addition of parallel impressions or grooves in the rails, which cause a "clacking" sound to be emitted as train wheels roll over them. The patent identifies Roy Wilson of Learning Curve as the inventor.

On the facts as found by the jury, Wilson was not the inventor and the patent should not have issued.

Clickety-Clack Track™provided an enormous boost to Learning Curve's sales. Learning Curve had $20 million in track sales by the first quarter of 2000, and $40 million for combined track and accessory sales.

II. Discussion

The relevant portions of the ITSA track the UTSA.

The parties agree that their dispute is governed by the Illinois Trade Secrets Act ("Act"). To prevail on a claim for misappropriation of a trade secret under the Act, the plaintiff must demonstrate that the information at issue was a trade secret, that it was misappropriated and that it was used in the defendant's business. The issue currently before us is whether there was legally sufficient evidence for the jury to find that PlayWood had a trade secret in its concept for the noise-producing toy railroad track that it revealed to Learning Curve on February 18, 1993.

Although the Act explicitly defines a trade secret in terms of [actual secrecy and reasonable efforts], Illinois courts frequently refer to six common law factors (which are derived from § 757 of the Restatement (First) of Torts) in determining whether a trade secret exists: (1) the extent to which the information is known outside of the plaintiff's business; (2) the extent to which the information is known by employees and others involved in the plaintiff's business; (3) the extent of measures taken by the plaintiff to guard the secrecy of the information; (4) the value of the information to the plaintiff's business and to its competitors; (5) the amount of time, effort and money expended by the plaintiff in developing the information; and (6) the ease or difficulty with which the information could be properly acquired or duplicated by others.

Contrary to Learning Curve's contention, we do not construe the foregoing factors as a six-part test, in which the absence of evidence on any single factor necessarily precludes a finding of trade secret protection. Instead, we interpret the common law factors as instructive guidelines for ascertaining whether a trade secret exists under the Act.

1. Extent to which PlayWood's concept for noise-producing toy railroad track was known outside of PlayWood's business

PlayWood presented substantial evidence from which the jury could have determined that PlayWood's concept for noise-producing toy

railroad track was not generally known outside of Playwood's business. It was undisputed at trial that no similar track was on the market until Learning Curve launched Clickety-Clack Track™ in late 1994, more than a year after PlayWood first conceived of the concept. Of course, as Learning Curve correctly points out, merely being the first or only one to use particular information does not in and of itself transform otherwise general knowledge into a trade secret. If it did, the first person to use the information, no matter how ordinary or well known, would be able to appropriate it to his own use under the guise of a trade secret. However, in this case, there was additional evidence from which the jury could have determined that PlayWood's concept was not generally known within the industry.

First, there was substantial testimony that Learning Curve had attempted to differentiate its track from that of its competitors for several months, but that it had been unable to do so successfully.

Furthermore, PlayWood's expert witness, Michael Kennedy, testified that PlayWood's concept, as embodied in Clickety-Clack Track™, was unique and permitted "its seller to differentiate itself from a host of competitors who [were] making a generic product." Kennedy explained that the look, sound and feel of the track made it distinct from other toy railroad track: "[W]hen a child runs a train across this track, he can feel it hitting those little impressions. And when you're talking about young children[,] having the idea that they can see something that they couldn't see before, feel something that they couldn't feel before, hear something that they couldn't hear before, that is what differentiates this toy from its other competitors."

Finally, PlayWood presented evidence that Learning Curve sought and obtained a patent on the noise-producing track. It goes without saying that the requirements for patent and trade secret protection are not synonymous. Unlike a patentable invention, a trade secret need not be novel or unobvious. The idea need not be complicated; it may be intrinsically simple and nevertheless qualify as a secret, unless it is common knowledge and, therefore, within the public domain. However, it is commonly understood that if an invention has sufficient novelty to be entitled to patent protection, it may be said a fortiori to be entitled to protection as a trade secret.

2. Extent to which PlayWood's concept was known to employees and others involved in PlayWood's business

We agree with PlayWood that the evidence was sufficient to establish that its concept for noise-producing track was known only by key individuals in its business.

At the outset, we note briefly that PlayWood was a small business, consisting only of Clausi and Moore. Illinois courts have recognized on several occasions that the expectations for ensuring secrecy are

different for small companies than for large companies. Apart from Clausi (PlayWood's sole toy designer and the person who conceived of the concept for noise-producing track) and Moore (PlayWood's sole officer and director), the only person who knew about the concept was Borsato, the person who physically produced PlayWood's prototype at Clausi's direction. The concept was disclosed to Borsato in order for PlayWood to develop fully its trade secret. Moreover, Borsato's actions were governed by a written confidentiality agreement with PlayWood. Indeed, as an extra precaution, Clausi even amended PlayWood's confidentiality agreement with Borsato immediately after the February 18, 1993, meeting to ensure that materials discussed during the meeting would remain confidential.

3. Measures taken by PlayWood to guard the secrecy of its concept

There also was sufficient evidence for the jury to determine that PlayWood took reasonable precautions to guard the secrecy of its concept. The Act requires the trade secret owner to take actions that are "reasonable under the circumstances to maintain [the] secrecy or confidentiality" of its trade secret; it does not require perfection. Whether the measures taken by a trade secret owner are sufficient to satisfy the Act's reasonableness standard ordinarily is a question of fact for the jury. Indeed, we previously have recognized that only in an extreme case can what is a "reasonable" precaution be determined, because the answer depends on a balancing of costs and benefits that will vary from case to case.

Here, the jury was instructed that it must find "by a preponderance of the evidence that PlayWood's trade secrets were given to Learning Curve as a result of a confidential relationship between the parties." By returning a verdict in favor of PlayWood, the jury necessarily found that Learning Curve was bound to PlayWood by a pledge of confidentiality. The jury's determination is amply supported by the evidence. Both Clausi and Moore testified that they entered into an oral confidentiality agreement with Abraham and Wilson before beginning their discussion on February 18, 1993. In particular, Clausi testified that he told Abraham and Wilson: "I also have some things, some ideas on how to produce the track and produce the trains now that I've had a chance to look at them for the last couple of days, and I think they're confidential as well. So if we're both okay with that, we should continue." In addition to this testimony, the jury heard that Learning Curve had disclosed substantial information to PlayWood during the February 18th meeting, including projected volumes, costs and profit margins for various products, as well as drawings for toys not yet released to the public. The jury could have inferred that Learning Curve would not have disclosed such information in the absence of a confidentiality agreement. Fi-

nally, the jury also heard (from several of Learning Curve's former business associates) that Learning Curve routinely entered into oral confidentiality agreements like the one with PlayWood.

PlayWood might have done more to protect its secret. As Learning Curve points out, PlayWood gave its only prototype of the noise-producing track to Wilson without first obtaining a receipt or written confidentiality agreement from Learning Curve—a decision that proved unwise in hindsight. Nevertheless, we believe that the jury was entitled to conclude that PlayWood's reliance on the oral confidentiality agreement was reasonable under the circumstances of this case. First, it is well established that the formation of a confidential relationship imposes upon the disclosee the duty to maintain the information received in the utmost secrecy and that the unprivileged use or disclosure of another's trade secret becomes the basis for an action in tort. Second, both Clausi and Moore testified that they believed PlayWood had a realistic chance to "get in the door" with Learning Curve and to produce the concept as part of Learning Curve's line of Thomas products. Clausi and Moore did not anticipate that Learning Curve would violate the oral confidentiality agreement and utilize PlayWood's concept without permission; rather, they believed in good faith that they "were going to do business one day again with Learning Curve with respect to the design concept." Finally, we believe that, as part of the reasonableness inquiry, the jury could have considered the size and sophistication of the parties, as well as the relevant industry. Both PlayWood and Learning Curve were small toy companies, and PlayWood was the smaller and less experienced of the two.

4. Value of the concept to PlayWood and to its competitors

There was substantial evidence from which the jury could have determined that PlayWood's concept had value both to PlayWood and to its competitors. It was undisputed at trial that Learning Curve's sales skyrocketed after it began to sell Clickety-Clack Track™. In addition, PlayWood's expert witness, Michael Kennedy, testified that PlayWood's concept for noise-producing track had tremendous value. Kennedy testified that the "cross-cuts and changes in the [track's] surface" imparted value to its seller by causing the track to "look different, feel different and sound different than generic track." Kennedy further testified that, in his opinion, the track would have commanded a premium royalty under a negotiated license agreement because the "invention allows its seller to differentiate itself from a host of competitors who are making a generic product with whom it is competing in a way that is proprietary and exclusive, and it gives [the seller] a significant edge over [its] competition."

Despite this evidence, the district court concluded that Play-

Wood's concept had no economic value. The court's conclusion was based, in part, on the fact that PlayWood's prototype did not work perfectly; as noted by the court, the first set of cuts were too shallow to produce sound and the second set of cuts were too deep to permit the train to roll smoothly across the track. In the district court's view, even if the concept of cutting grooves into the wooden track in order to produce noise originated with Clausi, the concept lacked value until it was refined, developed and manufactured by Learning Curve.

We cannot accept the district court's conclusion because it is belied by the evidence. At trial, Kennedy was asked whether, in his opinion, the fact that PlayWood's prototype did not work perfectly affected the value of PlayWood's concept, and he testified that it did not. Kennedy testified that he would assign the same value to PlayWood's concept as it was conceived on February 18, 1993, as he would the finished product that became known as Clickety-Clack Track™ because, at that time, he would have known "that most of the design [had] already been done and that [he] just need[ed] to go a little bit further to make it really lovely." Kennedy further testified that it was standard practice in the industry for a license to be negotiated based on a prototype (much like the one PlayWood disclosed to Learning Curve) rather than a finished product and that the license generally would cover the prototypical design, as well as any enhancements or improvements of that design. Based on this testimony, we cannot accept the district court's conclusion that PlayWood's concept possessed no economic value.

It is irrelevant under Illinois law that PlayWood did not actually use the concept in its business. The proper criterion is not 'actual use' but whether the trade secret is "of value" to the company. Kennedy's testimony was more than sufficient to permit the jury to conclude that the concept was "of value" to PlayWood. It is equally irrelevant that PlayWood did not seek to patent its concept. So long as the concept remains a secret, i.e., outside of the public domain, there is no need for patent protection. Professor Milgrim makes this point well: "Since every inventor has the right to keep his invention secret, one who has made a patentable invention has the option to maintain it in secrecy, relying upon protection accorded to a trade secret rather than upon the rights which accrue by a patent grant." It was up to PlayWood, not the district court, to determine when and how the concept should have been disclosed to the public.

Milgrim § 1.08[1]

5. Amount of time, effort and money expended by PlayWood in developing its concept

PlayWood expended very little time and money developing its concept; by Clausi's own account, the cost to PlayWood was less than

one dollar and the time spent was less than one-half hour. The district court determined that "such an insignificant investment is insufficient as a matter of Illinois law to establish the status of a 'trade secret.'" We believe that the district court gave too much weight to the time, effort and expense of developing the track.

A significant expenditure of time and/or money in the production of information may provide evidence of value. However, we do not understand Illinois law to require such an expenditure in all cases.

As pointed out by the district court, several Illinois cases have emphasized the importance of developmental costs. However, notably, none of those cases concerned the sort of innovative and creative concept that we have in this case. Indeed, several of the cases in Illinois that emphasize developmental costs concern compilations of data, such as customer lists. In that context, it makes sense to require the expenditure of significant time and money because there is nothing original or creative about the alleged trade secret. Given enough time and money, we presume that the plaintiff's competitors could compile a similar list.

Here, by contrast, we are dealing with a new toy design that has been promoted as "the first significant innovation in track design since the inception of wooden train systems." Toy designers, like many artistic individuals, have intuitive flashes of creativity. Often, that intuitive flash is, in reality, the product of earlier thought and practice in an artistic craft. We fail to see how the value of PlayWood's concept would differ in any respect had Clausi spent several months and several thousand dollars creating the noise-producing track.

6. Ease or difficulty with which PlayWood's concept could have been properly acquired or duplicated by others

Finally, we also believe that there was sufficient evidence for the jury to determine that PlayWood's concept could not have been easily acquired or duplicated through proper means. PlayWood's expert witness, Michael Kennedy, testified: "This is a fairly simple product if you look at it. But the truth is that because it delivers feeling and sound as well as appearance, it isn't so simple as it first appears. It's a little more elegant, actually, than you might think." In addition to Kennedy's testimony, the jury heard that Learning Curve had spent months attempting to differentiate its track from Brio's before Clausi disclosed PlayWood's concept of noise-producing track. From this evidence, the jury could have inferred that, if PlayWood's concept really was obvious, Learning Curve would have thought of it earlier.

Despite this evidence, the district court concluded that PlayWood's concept was not a trade secret because it could have been easily duplicated, stating that "[h]ad PlayWood succeeded in producing and marketing [the] notched track, the appearance of the track

product itself would have fully revealed the concept PlayWood now claims as a secret." Of course, the district court was correct in one sense; PlayWood's own expert recognized that, in the absence of patent or copyright protection, the track could have been reverse engineered just by looking at it. However, the district court failed to appreciate the fact that PlayWood's concept was not publicly available. As Professor Milgrim states: "A potent distinction exists between a trade secret which will be disclosed if and when the product in which it is embodied is placed on sale, and a 'trade secret' embodied in a product which has been placed on sale, which product admits of discovery of the 'secret' upon inspection, analysis, or reverse engineering. Until disclosed by sale the trade secret should be entitled to protection." *see also* Callmann ("The fact that a secret is easy to duplicate after it becomes known does not militate against its being a trade secret prior to that time."). Reverse engineering can defeat a trade secret claim, but only if the product could have been properly acquired by others, as is the case when the product is publicly sold. Here, PlayWood disclosed its concept to Learning Curve (and Learning Curve alone) in the context of a confidential relationship; Learning Curve had no legal authority to reverse engineer the prototype that it received in confidence. Accordingly, we must conclude that the jury was entitled to determine that PlayWood's concept could not easily have been acquired or duplicated through proper means.

Milgrim § 1.05[4]

Callmann § 14.15

2 Economic Value

Secrecy alone is not enough; not every secret is a trade secret. When one fifth-grader asks another to cross her heart and hope to die before revealing a bit of gossip about a mutual friend, this is not the kind of secret the courts will take an interest in. The economic value requirement performs this screening function.

In theory, economic value could be a threshold test: the courts could ask whether particular information is valuable enough for trade secret law to protect, just as they ask whether particular information is secret enough to protect. But in practice, the threshold of value is so low it rarely matters. "It is sufficient if the secret provides an advantage that is more than trivial." Instead, economic value expresses a general exclusion from trade secret subject matter. Personal – rather than professional – secrets are the wrong sort of thing for trade secret law.

Restatement (Third) of Unfair Competition § 39 cmt. e

Religious Technology Center v. Netcom On-Line Communications Services, Inc.

923 F. Supp. 1231 (N.D. Cal. 1995)

Plaintiffs, two Scientology-affiliated organizations claiming copyright and trade secret protection for the writings of the Church's

founder, L. Ron Hubbard, brought this suit against defendant Dennis Erlich, a former Scientology minister turned vocal critic of the Church, who allegedly put plaintiffs' protected works onto the Internet.

I. Background

Defendant Dennis Erlich was a member of the Church of Scientology from approximately 1968 until 1982. During his years with the Church, Erlich received training to enable him to provide ministerial counseling services, known as "auditing." While with the Church, Erlich had access to various Scientology writings, including those of the Church's founder, L. Ron Hubbard, which the Church alleges include published literary works as well as unpublished confidential materials (the "Advanced Technology works"). According to plaintiffs, Erlich had agreed to maintain the confidentiality of the Advanced Technology works.

Since leaving the Church, Erlich has been a vocal critic of Scientology and he now considers it part of his calling to foster critical debate about Scientology through humorous and critical writings. Erlich has expressed his views about the Church by contributing to the Internet "Usenet news-group" called "alt.religion.scientology" ("the newsgroup''), which is an on-line forum for the discussion of issues related to Scientology.

Plaintiff Religious Technology Center ("RTC''), a nonprofit religious corporation, "was formed by Scientologists, with the approval of Hubbard, to act as the protector of the religion of Scientology and to own, protect, and control the utilization of the Advanced Technology in the United States."

RTC allege[s] that Erlich misappropriated its trade secrets in the works, the confidentiality of which it alleges has been the subject of elaborate security measures. RTC further claims that those works are extremely valuable to the Church. Erlich admits to having posted excerpts from some of the works, but argues that the quotations were used to provide context for debate and as a basis for his criticism. Erlich further argues that he has neither claimed authorship of any of the works nor personally profited from his critique, satire, and commentary. Erlich contends that all of the documents he posted had been previously posted anonymously over the Internet, except for one, which he claims he received anonymously through the mail.

C. Likelihood of Success on Trade Secret Claim

In the third cause of action, plaintiff RTC alleges that Erlich misappropriated its trade secrets. California has adopted a version of the Uniform Trade Secret Act.

Cal. Civ. Code § 3426.1 *et seq.*

To establish its trade secret claim, RTC must show, inter alia, that the Advanced Technology works (1) have independent economic value to competitors and (2) have been kept confidential.

1. Nature of Works

Wollersheim: 796 F.2d 1076 (9th Cir. 1986)

As a preliminary matter, Erlich argues that the Advanced Technology works cannot be trade secrets because of their nature as religious scriptures. In *Religious Technology Center v. Wollersheim*, the Ninth Circuit rejected the Church's application for a preliminary injunction on the basis of a trade secret claim against a splinter Scientology group that had acquired stolen copies of the Advanced Technology. The Church argued not that the works gave them a competitive market advantage but that disclosure of the works would cause its adherents "religious harm from premature unsupervised exposure to the materials." Although the Ninth Circuit rejected plaintiffs' trade secret argument based on the spiritual value of the harm, it later noted that it had left open the question of whether the Advanced Technology works could qualify as trade secrets, assuming plaintiffs could prove that the secrets confer on them an actual economic advantage over competitors. Nonetheless, the court noted that such an allegation would "raise grave doubts about the Church's claim as a religion and a not-for-profit corporation."

The Church contends that the Advanced Technology works consist of "processes and the theory behind those processes that are to be used precisely as set forth by L. Ron Hubbard to assist the parishioner in achieving a greater spiritual awareness and freedom." Erlich responds that the works are essentially religious texts. Erlich argues that the Church cannot have trade secrets because trade secret law is necessarily related to commerce. The Church contends that, like other organizations, it must pay bills, and that licensing fees from these documents allow it to continue operating.

The Church's status as a religion does not itself preclude it from holding a trade secret. Restatement § 39 cmt. d ("[N]onprofit entities such as ... religious organizations can also claim trade secret protection for economically valuable information such as lists of prospective members or donors.''); UTSA § 3426.1(c) (defining "person" to include a "corporation ... or any other legal or commercial entity"). With the exception of *Bridge Publications, Inc. v. Vien* [(another Scientology case)], there is little authority to support a finding that religious materials can constitute trade secrets. However, there is "no category of information [that] is excluded from protection as a trade secret because of its inherent qualities." *Clark v. Bunker* (upholding as a trade secret a "detailed plan for the creation, promotion, financing, and sale of contracts for 'prepaid' or 'pre-need' funeral services").

Vien: 827 F. Supp. 629 (S.D. Cal. 1993)

Clark: 453 F.2d 1006 (9th Cir.1972)

Nor is there any authority to support Erlich's argument that the

Church's religious texts cannot be trade secrets because, unlike most trade secrets, these secrets are not used in the production or sales of a commodity but *are the commodities themselves*. The Church's Advanced Technology "course" materials, which are an integral part of the Church's spiritual counseling techniques, do not appear fundamentally different from the course manuals upheld as trade secrets in *SmokEnders, Inc. v. Smoke No More, Inc.*:

SmokEnders: 184 U.S.P.Q. 309 (S.D. Fla. 1974)

> The SmokEnders ("SE'') program requires attendees to follow a rigid structured regimen comprised of specific assignments and detailed concepts as recited in the manual.
>
> The SE program is a step-by-step regimented program which requires that each person attending a SE program perform each act of the program at a particular time. Each act required by a SE seminar attendee must be performed by attendees at the same time in the program, with each a minimum departure from the program.
>
> The SE trade secret resides in the composite program as it is arranged for step-by-step delivery to the attendees.

SmokEnders is arguably distinguishable because only the "moderators" and not the attendees were given access to the course materials in that case. However, the adherents of the Church, unlike the attendees and like the moderators in SmokEnders, are under a duty of confidentiality as to the materials. This case is analogous to *SmokEnders* because in both cases the "commodity" that is produced from the trade secrets is the result achieved by the person using the course materials and their techniques (whether it be stopping smoking or reaching a "higher spiritual existence").

Thus, there is at least some precedent for granting trade secret status to works that are techniques for improving oneself (though not specifically spiritually). Conversely, there is no authority for excluding religious materials from trade secret protection because of their nature. Indeed, there is no authority for excluding any type of information because of its nature. While the trade secret laws did not necessarily develop to allow a religion to protect a monopoly in its religious practices, the laws have nonetheless expanded such that the Church's techniques, which clearly are "used in the operation of the enterprise," are deserving of protection if secret and valuable.

Restatement (Third) of Unfair Competition § 39

Although trade secret status may apply to works that are techniques for spiritually improving oneself, the secret aspect of those techniques must be defined with particularity. See Restatement (requiring plaintiff to define the information claimed as a trade secret with sufficient definiteness). It appears that plaintiffs are claiming

§ 39 cmt. d

that the entire works themselves, which they describe as "processes and the theory behind those processes," constitute the trade secrets. This definition is problematic because it is impossible to determine when the "secret" has been lost after portions of the works have been disclosed. Although plaintiffs' definition has at least some support in *SmokEnders*, where the court upheld as a trade secret a "composite stop-smoking program" found in an instructional manual, this court is not satisfied that plaintiffs have identified their trade secrets with sufficient definiteness to support injunctive relief.

2. Independent Economic Value

A trade secret requires proof of independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use. A trade secret must have sufficient value in the owner's operation of its enterprise such that it provides an actual or potential advantage over others who do not possess the information.

RTC's president, Warren McShane, attests that

> The Advanced Technology is a source of substantial revenue for RTC in the form of licensing fees paid by Churches that are licensed to use the Advanced Technology. These Churches themselves receive a significant amount of their income from donations by parishioners for services based upon the Advanced Technology. These Churches pay RTC a percentage of the donations paid by parishioners for the services based upon the Advanced Technology. These donations and fees provide the majority of operating expenses of these various Church organizations.

The Church's need for revenues to support its services is no less because of its status as a religion. RTC points out that it receives six percent of what the individual churches receive in licensing fees. This evidence is sufficient to establish the value of the Advanced Technology works to the Church.

Erlich also argues that, to constitute a trade secret, information must give its owner a *competitive* advantage, which implies that the Church must have competitors. Although Erlich is clearly not a "competitor" of the Church, there is no requirement that a trade secret have any value to the defendant; the value can be to others who do not possess it. This evidence can be shown by direct evidence of the impact of the information on the business or by circumstantial evidence of the resources invested in producing the information, the precautions taken to protect its secrecy, and the willingness of others to pay for

its access. The several past instances of breakaway Scientology-like groups exploiting RTC's Advanced Technology works for their profit constitute reasonable circumstantial evidence that these works give the Church a competitive advantage. In fact, McShane's declaration constitutes direct evidence that the works have a significant impact on the donations received by the Church, providing a majority of its operating expenses. The status of the Advanced Technology works as trade secrets should not depend on Erlich's use of them. Accordingly, this court finds support for the court's conclusion in Vien that the Church has shown independent economic value.

3. Secrecy

Information is protectable as a trade secret where the owner has taken efforts that are reasonable under the circumstances to maintain its secrecy. "Reasonable efforts" can include advising employees of the existence of a trade secret, limiting access to the information on a "need to know basis," The court finds that RTC has put forward sufficient evidence that it took steps that were reasonable under the circumstances to protect its purported trade secrets. RTC's president describes elaborate means taken to ensure the confidentiality of the Advanced Technology works, including use of locked cabinets, safes, logging and identification of the materials, availability of the materials at only a handful of sites worldwide, electronic sensors attached to documents, locked briefcases for transporting works, alarms, photo identifications, security personnel, and confidentiality agreements for all of those given access to the materials. McShane testifies that all copies of the Advanced Technology works that are outside of the Church were gained through improper means, such as by theft. Thirty-five other declarants confirm that the measures mentioned by McShane have been used, though not in exactly the same manner, in other Churches and at other times. There is further evidence that Erlich himself signed confidentiality agreements with respect to the Advanced Technology materials and, specifically, the upper-level "NOTS" course materials. The court is unpersuaded by Erlich's claims that the Church's measures have not covered all locations where the Advanced Technology works are found and do not cover crucial time periods. Efforts at maintaining secrecy need not be extreme, just reasonable under the circumstances. The Church has made more than an adequate showing on this issue.[25]

[25]The notion that the Church's trade secrets are disclosed to thousands of parishioners makes this a rather unusual trade secrets case. However, because parishioners are required to maintain the secrecy of the materials, the court sees no reason why the mere fact that many people have seen the information should negate the information's trade secret status. While it is logically more likely that a secret will leak out when more people are entrusted with it, absent evidence of leakage

Erlich raises a number of objections to the Church's claims of confidentiality. Erlich argues that the Church's trade secrets have been made available to the public through various means. The unprotected disclosure of a trade secret will cause the information to forfeit its trade secret status, since "information that is generally known or readily ascertainable through proper means by others is not protectable as a trade secret." Once trade secrets have been exposed to the public, they cannot later be recalled.

Restatement § 39 cmt. f.

Erlich argues that many of the Advanced Technology documents have been available in open court records in another case, *Church of Scientology Int'l v. Fishman*, destroying the necessary element of secrecy. However, the *Fishman* court recently issued an order sealing the file pending a decision on whether the documents are trade secrets. Even if those records were temporarily open to the public, the court will not assume that their contents have been generally disclosed, especially when this question is still pending before the district court in *Fishman*. Such a disclosure, without evidence that the secrets have become generally known, does not necessarily cause RTC to forfeit its trade secrets. The contrary result would mean that if documents were ever filed without a sealing order, even for a short time, the court would not be able to decide that they should be sealed because the documents would have lost their potential trade secret status by virtue of the temporary unsealing. The only fair result would be to allow trade secret status for works that are otherwise protectable as trade secrets unless they were somehow made generally available to the public during the period they were unsealed, such as by publication.

Fishman: No. 91-6426 (C.D. Cal. 1994)

Erlich further asserts that the Advanced Technology has been largely disclosed in the popular press. These articles may reveal information referring to or hinting at the trade secrets, but may not disclose the secrets themselves, see However, as previously noted, the court is not certain how to properly define the "secrets." To the extent that someone uses or discloses any information taken from any of these articles, there is clearly no trade secret claim. However, much of Erlich's postings copied all or almost all of sections of the Advanced Technology works, which is far more than has ever been disclosed in the popular press. In fact, several of the works posted by Erlich are not mentioned in any of the clippings in the Berger declaration. Arguably, the Church's alleged secrets are such that their value depends on the availability of the complete courses and not mere fragments, thus disclosures that describe parts of the works or disclose isolated portions do not necessarily suffice to ruin the value of the en-

the court finds that giving out the secrets to a large number of people, though no more than necessary, is not itself an unreasonable security step.

tire works as secrets. However, without a clearer definition of what constitute the "secrets," the court is unable to determine whether some have been made generally known to the public.

Finally, Erlich newly emphasizes in his Reply that the works he posted were not secrets because he received them through proper means: eight of the documents were allegedly previously posted anonymously to a public portion of the Internet and one of the documents allegedly came to Erlich anonymously through the U.S. mail. Erlich claims that because the alleged trade secrets were received from "public sources," they should lose their trade secret protection. Although the Internet is a new technology, it requires no great leap to conclude that because more than 25 million people could have accessed the newsgroup postings from which Erlich alleges he received the works, these works would lose their status as secrets. While the Internet has not reached the status where a temporary posting on a newsgroup is akin to publication in a major newspaper or on a television network, those with an interest in using the Church's trade secrets to compete with the Church are likely to look to the newsgroup. Thus, posting works to the Internet makes them "generally known" to the relevant people – the potential "competitors" of the Church.

The court is troubled by the notion that any Internet user, including those using "anonymous remailers" to protect their identity, can destroy valuable intellectual property rights by posting them over the Internet, especially given the fact that there is little opportunity to screen postings before they are made. Nonetheless, one of the Internet's virtues, that it gives even the poorest individuals the power to publish to millions of readers, can also be a detriment to the value of intellectual property rights. The anonymous (or judgment proof) defendant can permanently destroy valuable trade secrets, leaving no one to hold liable for the misappropriation. Although a work posted to an Internet newsgroup remains accessible to the public for only a limited amount of time, once that trade secret has been released into the public domain there is no retrieving it. While the court is persuaded by the Church's evidence that those who made the original postings likely gained the information through improper means, as no one outside the Church or without a duty of confidence would have had access to those works, this does not negate the finding that, once posted, the works lost their secrecy. Although Erlich cannot rely on his own improper postings to support the argument that the Church's documents are no longer secrets, evidence that another individual has put the alleged trade secrets into the public domain prevents RTC from further enforcing its trade secret rights in those materials. Because there is no evidence that Erlich is a privy of any of the alleged original misappropriators, he is not equitably estopped from raising their previous public disclosures as a defense to his disclo-

sure. The court is thus convinced that those postings made by Erlich were of materials that were possibly already generally available to the public. Therefore, RTC has not shown a likelihood of success on an essential element of its trade secret claim.

Exploits Problem

Exploit brokers are in the business of helping people defeat computer security. Governments want to thumb through the hard drives of terrorists, criminals, and dissidents. Identity thieves want passwords and bank account numbers. Extortionists want to delete data and hold it for ransom. Corporate spies want access to competitors' computers. All of them are willing to pay handsomely for the technical tools that enable them to do so. These tools are typically built around "exploits": short pieces of software that take advantage of bugs in commonly-used software like Windows, Adobe Flash, and iOS. As soon as as software companies learn about these bugs, they race to issue updates to fix them; once that happens, any exploits based on those bugs stop working. Thus, secrecy is essential to the exploit business in two ways: many of the uses are illegal, and exploits become worthless soon after they become public knowledge.

Can exploit brokers – who buy exploits from the computer security experts who discover them and then resell those exploits to various clients – rely on trade secret law? Should they be able to? Do the materials in this chapter and the previous one shed any light on how you would expect the exploit business to work, and how it ought to be regulated?

B Ownership

1 Collaborations

Restatement (Third) of Unfair Competition

§ 42
Breach of Confidence by Employees

cmt. e. *Allocation of ownership between employers and employees.* – The law of agency has established rules governing the ownership of valuable information created by employees during the course of an employment relationship. See Restatement, Second, Agency § 397. In the absence of a contrary agreement, the law ordinarily assigns ownership of an invention or idea to the person who conceives it. However, valuable information that is the product of an employee's assigned duties is owned by the employer, even when the information results from the application of the employee's personal knowledge or skill.

An employee is ordinarily entitled to claim ownership of patents and trade secrets developed outside the scope of the employee's assigned duties, even if the invention or idea relates to the employer's business and was developed using the employer's time, personnel, facilities, or equipment. In the latter circumstances, however, the employer is entitled to a "shop right"—an irrevocable, nonexclusive, royalty-free license to use the innovation. Similarly, employees retain ownership of information comprising their general skill, knowledge, training, and experience.

Although the rules governing ownership of valuable information created during an employment relationship are most frequently applied to inventions, the rules are also applicable to information such as customer lists, marketing ideas, and other valuable business information. If an employee collects or develops such information as part of the assigned duties of the employment, the information is owned by the employer. Thus, if the information qualifies for protection as a trade secret, unauthorized use or disclosure will subject the employee to liability.

cmt. g. *Contractual protection*. – Absent an applicable statutory prohibition, agreements relating to the ownership of inventions and discoveries made by employees during the term of the employment are generally enforceable according to their terms. Employment agreements sometimes include provisions granting the employer ownership of all inventions and discoveries conceived by the employee during the term of the employment. In some situations, however, it may be difficult to prove when a particular invention was conceived. The employee may have an incentive to delay disclosure of the invention until after the employment is terminated in order to avoid the contractual or common law claims of the employer. It may also be difficult to establish whether a post-employment invention was improperly derived from the trade secrets of the former employer. Some employment agreements respond to this uncertainty through provisions granting the former employer ownership of inventions and discoveries relating to the subject matter of the former employment that are developed by the employee even after the termination of the employment. Such agreements can restrict the former employee's ability to exploit the skills and training desired by other employers and may thus restrain competition and limit employee mobility. The courts have therefore subjected such "holdover" agreements to scrutiny analogous to that applied to covenants not to compete. Thus, the agreement may be unenforceable if it extends beyond a reasonable period

of time or to inventions or discoveries resulting solely from the general skill and experience of the former employee.

2 Priority

Because there is no requirement that a trade secret be unique – more than one person can have the same information and each has a valid and independent trade secret provided the other requirements are met – trade secret does not generally raise difficult issues about which of several competing claimants developed the information first.

C Procedures

The most important – and arguably the only – procedural prerequisite to having a valid trade secret is making *reasonable efforts* to preserve its secrecy. There is no requirement that the owner of a trade secret register it as one with a government agency, or take other formal steps to identify the secret in advance. Remember that everyone agrees a trade secret must actually be secret to be protected; what does a reasonable efforts requirement add? Why?

The Restatements treated reasonable efforts as part of the secrecy analysis. Under the UTSA, EEA, and DTSA, it is a separate element.

312 F.3d 263 (7th Cir. 2002)

United States v. Lange

One ingredient of a trade secret is that "the owner thereof has taken reasonable measures to keep such information secret". Lange contends that the proof fell short, but a sensible trier of fact could have concluded that RAPCO took "reasonable measures to keep the information secret". RAPCO stores all of its drawings and manufacturing data in its CAD room, which is protected by a special lock, an alarm system, and a motion detector. The number of copies of sensitive information is kept to a minimum; surplus copies are shredded. Some information in the plans is coded, and few people know the keys to these codes. Drawings and other manufacturing information contain warnings of RAPCO's intellectual property rights; every employee receives a notice that the information with which he works is confidential. None of RAPCO's subcontractors receives full copies of the schematics; by dividing the work among vendors, RAPCO ensures that none can replicate the product. This makes it irrelevant that RAPCO does not require vendors to sign confidentiality agreements; it relies on deeds (the splitting of tasks) rather than promises to maintain confidentiality. Although, as Lange says, engineers and drafters knew where to get the key to the CAD room door, keeping these employees out can't be an ingredient of "reasonable measures to keep the information secret"; then no one could do any work. So too with plans sent to subcontractors, which is why dissemination to

suppliers does not undermine a claim of trade secret.

Rockwell Graphic Systems, Inc. v. DEV Industries, Inc.

925 F.2d 174 (7th Cir. 1991)

Rockwell, which manufactures printing presses, sued DEV, a competing manufacturer, for making replacement parts for Rockwell presses. A key component of Rockwell's claims ws that DEV had in its possession about 100 "piece part drawings": detailed manufacturing diagrams for parts to Rockwell presses. Rockwell alleged that the piece part drawings had been stolen by former Rockwell employees including Fleck and Peloso, both of whom were subequently employed by DEV. Along the way, DEV argued that Rockwell failed to make reasonable efforts to keep the diagrams secret, which led Judge Posner to discuss the purpose of the reasonable efforts requirement.

The requirement of reasonable efforts has both evidentiary and remedial significance, and this regardless of which of the two different conceptions of trade secret protection prevails. (Both conceptions have footholds in Illinois law, as we shall see.) The first and more common merely gives a remedy to a firm deprived of a competitively valuable secret as the result of an independent legal wrong, which might be conversion or other trespass or the breach of an employment contract or of a confidentiality agreement. Under this approach, because the secret must be taken by improper means for the taking to give rise to liability, the only significance of trade secrecy is that it allows the victim of wrongful appropriation to obtain damages based on the competitive value of the information taken. The second conception of trade secrecy is that "trade secret" picks out a class of socially valuable information that the law should protect even against nontrespassory or other lawful conduct.

It should be apparent that the two different conceptions of trade secret protection are better described as different emphases. The first emphasizes the desirability of deterring efforts that have as their sole purpose and effect the redistribution of wealth from one firm to another. The second emphasizes the desirability of encouraging inventive activity by protecting its fruits from efforts at appropriation that are, indeed, sterile wealth-redistributive – not productive – activities. The approaches differ, if at all, only in that the second does not limit the class of improper means to those that fit a preexisting pigeonhole in the law of tort or contract or fiduciary duty – and it is by no means clear that the first approach assumes a closed class of wrongful acts, either.

Under the first approach, at least if narrowly interpreted so that it does not merge with the second, the plaintiff must prove that the defendant obtained the plaintiff's trade secret by a wrongful act, illustrated here by the alleged acts of Fleck and Peloso in removing piece part drawings from Rockwell's premises without authorization, in violation of their employment contracts and confidentiality agreements, and using them in competition with Rockwell. Rockwell is unable to prove directly that the 100 piece part drawings it got from DEV in discovery were stolen by Fleck and Peloso or obtained by other improper means. But if it can show that the probability that DEV could have obtained them otherwise – that is, without engaging in wrongdoing – is slight, then it will have taken a giant step toward proving what it must prove in order to recover under the first theory of trade secret protection. The greater the precautions that Rockwell took to maintain the secrecy of the piece part drawings, the lower

the probability that DEV obtained them properly and the higher the probability that it obtained them through a wrongful act; the owner had taken pains to prevent them from being obtained otherwise.

Under the second theory of trade secret protection, the owner's precautions still have evidentiary significance, but now primarily as evidence that the secret has real value. For the precise means by which the defendant acquired it is less important under the second theory, though not completely unimportant; remember that even the second theory allows the unmasking of a trade secret by some means, such as reverse engineering. If Rockwell expended only paltry resources on preventing its piece part drawings from falling into the hands of competitors such as DEV, why should the law, whose machinery is far from costless, bother to provide Rockwell with a remedy? The information contained in the drawings cannot have been worth much if Rockwell did not think it worthwhile to make serious efforts to keep the information secret.

The remedial significance of such efforts lies in the fact that if the plaintiff has allowed his trade secret to fall into the public domain, he would enjoy a windfall if permitted to recover damages merely because the defendant took the secret from him, rather than from the public domain as it could have done with impunity. It would be like punishing a person for stealing property that he believes is owned by another but that actually is abandoned property. If it were true, as apparently it is not, that Rockwell had given the piece part drawings at issue to customers, and it had done so without requiring the customers to hold them in confidence, DEV could have obtained the drawings from the customers without committing any wrong. The harm to Rockwell would have been the same as if DEV had stolen the drawings from it, but it would have had no remedy, having parted with its rights to the trade secret. This is true whether the trade secret is regarded as property protected only against wrongdoers or as property protected against the world. In the first case, a defendant is perfectly entitled to obtain the property by lawful conduct if he can, and he can if the property is in the hands of persons who themselves committed no wrong to get it. In the second case the defendant is perfectly entitled to obtain the property if the plaintiff has abandoned it by giving it away without restrictions.

It is easy to understand therefore why the law of trade secrets requires a plaintiff to show that he took reasonable precautions to keep the secret a secret. If analogies are needed, one that springs to mind is the duty of the holder of a trademark to take reasonable efforts to police infringements of his mark, failing which the mark is likely to be deemed abandoned, or to become generic or descriptive (and in either event be unprotectable). The trademark owner who fails to police his mark both shows that he doesn't really value it very much

and creates a situation in which an infringer may have been unaware that he was using a proprietary mark because the mark had drifted into the public domain, much as DEV contends Rockwell's piece part drawings have done.

But only in an extreme case can what is a "reasonable" precaution be determined on a motion for summary judgment, because the answer depends on a balancing of costs and benefits that will vary from case to case and so require estimation and measurement by persons knowledgeable in the particular field of endeavor involved. On the one hand, the more the owner of the trade secret spends on preventing the secret from leaking out, the more he demonstrates that the secret has real value deserving of legal protection, that he really was hurt as a result of the misappropriation of it, and that there really was misappropriation. On the other hand, the more he spends, the higher his costs. The costs can be indirect as well as direct. The more Rockwell restricts access to its drawings, either by its engineers or by the vendors, the harder it will be for either group to do the work expected of it. Suppose Rockwell forbids any copying of its drawings. Then a team of engineers would have to share a single drawing, perhaps by passing it around or by working in the same room, huddled over the drawing. And how would a vendor be able to make a piece part – would Rockwell have to bring all that work in house? Such reconfigurations of patterns of work and production are far from costless; and therefore perfect security is not optimum security.

D Infringement: Similarity

The essence of trade secret misappropriation is to obtain or use secret information acquired through "improper means." Note that this essence includes an implicit requirement that the information the defendant obtained or used is the *same* information the plaintiff claims as a trade secret.

Big Vision Private, Ltd. v. E.I. Dupont De Nemours & Co.

1 F. Supp. 3d 224 (S.D.N.Y. 2014)

Big Vision's second argument is that DuPont's recyclable banner product lines misappropriate Big Vision's trade secret. Quite simply, Big Vision cannot demonstrate that its recyclable banners are substantially similar to DuPont's. The parties do not dispute that DuPont's recyclable banner products are not made by either lamination or coextrusion. None of DuPont's recyclable banner products use the three-layer structures tested at the Trials, the range of $CaCO_3$ tested at the Trials, or "minimal" amounts of Entira (to the extent it has been defined), since DuPont's products either use 100% or 0% Entira. Furthermore, DuPont's recyclable banner products are not

printable with solvent ink. Thus, to the extent Big Vision's trade secret is discernible, DuPont's products implicate almost none of its elements.[60]

E Infringement: Prohibited Conduct

Before you dive into the new cases, look back at the cases from the first half of the chapter. You read them as cases on the existence of trade secrets. *They are also cases on misappropriation.* What did the defendants in each case do? Was it misappropriation? This duality is typical of intellectual property cases. Both protectability and misappropriation are required to find a defendant liable, which means that both protectability and misappropriation are potentially in play in every case. A trade secret defendant can win by showing that the plaintiff lacked a valid protectable trade secret in the first place, or by showing that the defendant did not misappropriate that trade secret.

For more on the relationship between protection and infringement, see Mark A. Lemley & Mark P. McKenna, *Scope*, 57 Wm & Mary L. Rev. 2197 (2016).

1 Proving Infringement

Grynberg v. BP, PLC

No. 06 Civ. 6494 (RJH), 2011 U.S. Dist. LEXIS 34286 (S.D.N.Y. Mar. 30, 2011)

In the enormous record before the court, there is no direct evidence that ARCO used Grynberg's information in evaluating Tengiz or the Caspian pipeline. How ARCO came to make those investments is no mystery however: engineers and executives alike have testified in detail as to the evaluation and decision-making process. With respect to both investments, publically available resources were used initially, and then supplemented at length in data rooms set up by the organizations managing the investment – for Tengiz the Chevron data room and for the Caspian Pipeline the Oman data room. Further, although plaintiff's experts state generally that the publically available sources were inferior to Grynberg's information, plaintiff concedes that his information – obtained in 1989-90 – was "outdated" by 1996. Moreover, plaintiff admits that when Chevron invested in Tengiz it had been given access by the Kazakhs to all the information to which Grynberg was privy, information that would have been available in the comprehensive and up to date data rooms prepared for ARCO when it reviewed the Tengiz investment years later.

Plaintiff argues that ARCO's alleged use can be proven circumstantially, in much the same way that "use of a trade secret can be

[60] Plaintiff argues that because DuPont's banners do not exhibit the four-item "wish list" that Big Vision's trade secret is supposed to cause, DuPont must have ineptly misappropriated its trade secret. While clever, this argument is not a fair reading of the record, which makes clear that DuPont's recyclable banners are simply not substantially similar to Big Vision's alleged trade secret.

proven by showing access to the trade secret plus the subsequent similarity of the trade secret and a Defendant's product." Indeed, the law of trade secrets acknowledges the basic logic that when two products look alike, there is probably more than a coincidental connection between them. See *Electro-Miniatures Corp. v. Wendon Co.* (misappropriation provable by circumstantial evidence where company that had struggled to produce printed circuit slip rings suddenly "issued a catalog depicting an entire line of printed circuit slip ring assemblies, resembling those built by the plaintiff"). Nor is there any inherent reason to limit this approach to cases involving products (electrical or otherwise). Logically, in any case where what is done or produced by the alleged thief bears some unique markers of the allegedly stolen secrets, it may be inferred that the thief used the secrets. Thus in *Rochester Midland Corp. v. Enerco Corp.*, use of pricing, product, and customer information could be inferred where eighteen accounts associated with a poached employee switched to the defendant company shortly after the confidential information was brought over. However, the inference is only as strong as logic demands – where an alleged thief's products lack a suspicious similarity to the secrets, the inference would not lie.

Electro-Miniatures: 771 F.2d 23, 26 (2d Cir. 1985)

Rochester Midland: No. 1:08-cv98, 2009 U.S. Dist. LEXIS 46103, 2009 WL 1561817, *19 (W.D. Mich. June 1, 2009)

Grynberg could make a circumstantial case for use under this theory, then, only to the extent that ARCO's actions bore the unique marks of his information, or showed a suspicious similarity to it. ARCO did eventually make investments in Tengiz and the Caspian pipeline, which were among the investments that Grynberg had endorsed and relayed information about. However ARCO also declined to pursue other investments Grynberg had advocated, such as the Karachaganak oil field also in the area of mutual interest. Moreover nothing about ARCO's investments bears the markers of the Grynberg information in such a way as to justify inferring the use of that information. It is not as if ARCO built wells at particular locations previously suggested by Grynberg, worked primarily through contacts developed by Grynberg, or tied its investments to Grynberg's numbers in a suspiciously similar way. Rather, an oil company chose to invest in one of the largest oil fields in the world, in a manner different from that envisioned by Grynberg at the time he developed his proposed consortium. That it did so is unsurprising and does not evince the kind of suspicious similarity present in *Electro-Miniatures* and *Rochester Midland*. Accordingly an inference of use based on similarity is not appropriate here.

2 Direct Infringement

Restatement (Third) of Unfair Competition

§ 43
Improper Acquisition of Trade Secrets

"Improper" means of acquiring another's trade secret ... include theft, fraud, unauthorized interception of communications, inducement of or knowing participation in breach of confidence, and other means either wrongful in themselves or wrongful under the circumstances of the case. Independent discovery and analysis of publicly available products or information are not improper means of acquisition.

Uniform Trade Secrets Act

§ 1(1)
Definitions

"Improper means" includes theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means;

These lists of "improper means" can be roughly divided into two types of wrongful conduct. On the one hand there is *espionage*, which often involves theft, trespass, or computer hacking. On the other hand there is *breach of confidence*, which often involves violating a promise to keep someone else's secrets. It is tempting to to conclude that "improper means" consist of torts (espionage) and breach of contract (breach of confidence), but this equation is a little too pat.

E.I. du Pont de Nemours & Co. v. Christopher

431 F.2d 1012 (5th Cir. 1970)

This is a case of industrial espionage in which an airplane is the cloak and a camera the dagger. The defendants-appellants, Rolfe and Gary Christopher, are photographers in Beaumont, Texas. The Christophers were hired by an unknown third party to take aerial photographs of new construction at the Beaumont plant of E. I. DuPont de Nemours & Company, Inc. Sixteen photographs of the DuPont facility were taken from the air on March 19, 1969, and these photographs were later developed and delivered to the third party.

Edmund Kitch, in *The Law and Economics of Rights in Valuable Information*, 9 J. Legal Stud. 683 (1980), speculates that "The appearance of the airplane at such an opportune moment [may have] suggested to DuPont that some kind of inside leak had tipped off the photographers (or their client) to the opportunity."

DuPont subsequently filed suit against the Christophers, alleging that the Christophers had wrongfully obtained photographs revealing DuPont's trade secrets which they then sold to the undisclosed third party. DuPont contended that it had developed a highly secret but unpatented process for producing methanol, a process which gave DuPont a competitive advantage over other producers. This process, DuPont alleged, was a trade secret developed after much expensive and time-consuming research, and a secret which the company had taken special precautions to safeguard. The area photographed by the Christophers was the plant designed to produce methanol by this secret process, and because the plant was still under construction parts of the process were exposed to view from directly above the construction area. Photographs of that area, DuPont

alleged, would enable a skilled person to deduce the secret process for making methanol. DuPont thus contended that the Christophers had wrongfully appropriated DuPont trade secrets by taking the photographs and delivering them to the undisclosed third party.

The Christophers argued both at trial and before this court that they committed no "actionable wrong" in photographing the DuPont facility and passing these photographs on to their client because they conducted all of their activities in public airspace, violated no government aviation standard, did not breach any confidential relation, and did not engage in any fraudulent or illegal conduct. In short, the Christophers argue that for an appropriation of trade secrets to be wrongful there must be a trespass, other illegal conduct, or breach of a confidential relationship. We disagree.

It is true, as the Christophers assert, that the previous trade secret cases have contained one or more of these elements. However, we do not think that the Texas courts would limit the trade secret protection exclusively to these elements.

Although the previous cases have dealt with a breach of a confidential relationship, a trespass, or other illegal conduct, the rule is much broader than the cases heretofore encountered. Not limiting itself to specific wrongs, Texas adopted subsection (a) of the Restatement which recognizes a cause of action for the discovery of a trade secret by any "improper" means.

The question remaining, therefore, is whether aerial photography of plant construction is an improper means of obtaining another's trade secret. We conclude that it is and that the Texas courts would so hold. The Supreme Court of that state has declared that "the undoubted tendency of the law has been to recognize and enforce higher standards of commercial morality in the business world." *Hyde Corporation v. Huffines*. That court has quoted with approval articles indicating that the proper means of gaining possession of a competitor's secret process is through inspection and analysis of the product in order to create a duplicate. Later another Texas court explained:

Hyde: 314 S.W.2d 763 (Tex. 1958)

> The means by which the discovery is made may be obvious, and the experimentation leading from known factors to presently unknown results may be simple and lying in the public domain. But these facts do not destroy the value of the discovery and will not advantage a competitor who by unfair means obtains the knowledge *without paying the price expended by the discoverer*."

Fowler: 316 S.W.2d 111 (Tex. Civ. App. 1958)

Brown v. Fowler. We think, therefore, that the Texas rule is clear. One may use his competitor's secret process if he discovers the process by reverse engineering applied to the finished product; one may use

a competitor's process if he discovers it by his own independent research; but one may not avoid these labors by taking the process from the discoverer without his permission at a time when he is taking reasonable precautions to maintain its secrecy. To obtain knowledge of a process without spending the time and money to discover it independently is improper unless the holder voluntarily discloses it or fails to take reasonable precautions to ensure its secrecy.

In the instant case the Christophers deliberately flew over the DuPont plant to get pictures of a process which DuPont had attempted to keep secret. The Christophers delivered their pictures to a third party who was certainly aware of the means by which they had been acquired and who may be planning to use the information contained therein to manufacture methanol by the DuPont process. The third party has a right to use this process only if he obtains this knowledge through his own research efforts, but thus far all information indicates that the third party has gained this knowledge solely by taking it from DuPont at a time when DuPont was making reasonable efforts to preserve its secrecy. In such a situation DuPont has a valid cause of action to prohibit the Christophers from improperly discovering its trade secret and to prohibit the undisclosed third party from using the improperly obtained information.

In taking this position we realize that industrial espionage of the sort here perpetrated has become a popular sport in some segments of our industrial community. However, our devotion to free wheeling industrial competition must not force us into accepting the law of the jungle as the standard of morality expected in our commercial relations. Our tolerance of the espionage game must cease when the protections required to prevent another's spying cost so much that the spirit of inventiveness is dampened. Commercial privacy must be protected from espionage which could not have been reasonably anticipated or prevented. We do not mean to imply, however, that everything not in plain view is within the protected vale, nor that all information obtained through every extra optical extension is forbidden. Indeed, for our industrial competition to remain healthy there must be breathing room for observing a competing industrialist. A competitor can and must shop his competition for pricing and examine his products for quality, components, and methods of manufacture. Perhaps ordinary fences and roofs must be built to shut out incursive eyes, but we need not require the discoverer of a trade secret to guard against the unanticipated, the undetectable, or the unpreventable methods of espionage now available.

In the instant case DuPont was in the midst of constructing a plant. Although after construction the finished plant would have protected much of the process from view, during the period of construction the trade secret was exposed to view from the air. To require DuPont to

put a roof over the unfinished plant to guard its secret would impose an enormous expense to prevent nothing more than a school boy's trick. We introduce here no new or radical ethic since our ethos has never given moral sanction to piracy. The marketplace must not deviate far from our mores. We should not require a person or corporation to take unreasonable precautions to prevent another from doing that which he ought not do in the first place. Reasonable precautions against predatory eyes we may require, but an impenetrable fortress is an unreasonable requirement, and we are not disposed to burden industrial inventors with such a duty in order to protect the fruits of their efforts. "Improper" will always be a word of many nuances, determined by time, place, and circumstances. We therefore need not proclaim a catalogue of commercial improprieties. Clearly, however, one of its commandments does say "thou shall not appropriate a trade secret through deviousness under circumstances in which countervailing defenses are not reasonably available."

Having concluded that aerial photography, from whatever altitude, is an improper method of discovering the trade secrets exposed during construction of the DuPont plant, we need not worry about whether the flight pattern chosen by the Christophers violated any federal aviation regulations. Regardless of whether the flight was legal or illegal in that sense, the espionage was an improper means of discovering DuPont's trade secret.

Would *Christopher* have been decided the same way if it were 2015 and the defendants used publicly available satellite photos from Google Earth to observe the the construction of the plant? What if they flew a small ten-pound remote-control drone over the plant? What if they flew the drone over their neighbor's fenced backyard and photographed him sunbathing nude?

Kamin v. Kuhnau

374 P.2d 912 (Or. 1962)

For approximately 25 years plaintiff had been employed by a knitting mill as a mechanic. In 1953 he entered into the garbage collection business. From the time plaintiff entered into the garbage collection business he began thinking of methods of facilitating the loading of garbage trucks and of compressing or packing the materials after they were loaded. By 1955 he had done some experimental work on his own truck, devising a hoist mechanism operated by hydraulic cylinders to lift a bucket from the ground to the top of the truck box. By this time he had also arrived at the conclusion that the packing of the loaded materials could best be effected through the use of a hydraulically operated plow which would move against the loaded materials and compress them against the interior of the truck. At the time plaintiff conceived this solution there were on the market garbage truck bodies containing various "packer" mechanisms, including hydraulically operated plows. However, plaintiff and defendant apparently were not aware of the use of hydraulic cylinders for this purpose and thought that plaintiff's idea was novel in this respect.

In January, 1955, plaintiff made arrangements with defendant Kuhnau, president and manager of Oregon Rental Equipment Company, to use the company's machine shop and one or more of its em-

ployees to assist plaintiff in carrying on further experimental work in developing plaintiff's ideas. This experimental work was carried on for approximately one year. According to plaintiff's evidence, all of the experimental work was done under his supervision and Kuhnau had no voice or control as to the manner in which the developmental work was to be carried on. It is Kuhnau's contention that he and the employees of Oregon Rental Equipment Company contributed suggestions and ideas which were used in the development and improvement of the truck body and compressor mechanism.

In the course of working on the project several persons who were engaged in the garbage collection business came to the defendant's machine shop, observed the progress being made by plaintiff and made suggestions as to the practical application of plaintiff's idea. Sometime in the summer of 1956 the truck and compressor mechanism which plaintiff was seeking to develop was crystallized substantially in the form in which it now exists.

When plaintiff had completed his experimental work he began to receive orders for truck bodies embodying his improvements. The first two units sold were manufactured by Oregon Rental Equipment Company. After the sale of these two units (in the spring of 1956) Kuhnau terminated his connections with Oregon Rental Equipment Company. He rented a machine shop at another location and began business under the name of R.K. Truck Sales. Between May and October, 1956, he manufactured ten units for plaintiff. For each unit Kuhnau received an amount agreed upon by the parties. Plaintiff fixed the selling price of the unit and his profit consisted of the difference between the selling price and the amount he paid Kuhnau.

On or about October 1, 1956, Kuhnau informed plaintiff that he was going to manufacture truck bodies in competition with plaintiff. Kuhnau testified that the relationship was terminated as a result of a disagreement over the amount he was to receive for manufacturing the unit for plaintiff. Plaintiff contends that Kuhnau terminated the relationship for the purpose of entering into competition with plaintiff. The units manufactured by Kuhnau were similar to those which he had previously manufactured for plaintiff. However, there were some differences in the design of the two units. The principal difference was that Kuhnau mounted the hydraulic cylinder operating the plow or blade under the truck bed whereas the cylinder in plaintiff's truck was above the bed. There was testimony supporting plaintiff's assertion that it was his idea to place the cylinder under the bed of the truck but that suggestion was not adopted because Kuhnau did not think it was feasible.

Whether the information disclosed was intended to be appropriable by the disclosee will depend upon the relationship of the parties and the circumstances under which the disclosure was made. It is

not necessary to show that the defendant expressly agreed not to use the plaintiff's information; the agreement may be implied. And the implication may be made not simply as a product of the quest for the intention of the parties but as a legal conclusion recognizing the need for ethical practices in the commercial world. In the case at bar the relationship between plaintiff and Kuhnau was such that an obligation not to appropriate the plaintiff's improvements could be implied. Kuhnau was paid to assist plaintiff in the development of the latter's idea. It must have been apparent to Kuhnau that plaintiff was attempting to produce a unit which could be marketed. Certainly it would not have been contemplated that as soon as the packer unit was perfected Kuhnau would have the benefit of plaintiff's ideas and the perfection of the unit through painstaking and expensive experimentation. It is to be remembered that the plaintiff's experimentation was being carried on, not on the assumption that he was duplicating an existing machine, but upon the assumption that he was creating a new product. It has been recognized in the cases that a manufacturer who has been employed to develop an inventor's ideas is not entitled to appropriate those ideas to his own use.

Hyde is closely in point. In that case the defendant manufacturer, having gained knowledge of a garbage compressor through a licensing agreement with the plaintiff inventor, repudiated the agreement and proceeded to manufacture and sell on its own account a compressor of similar design. Defendant was enjoined. The court held that the parties were in a confidential relationship and that the information relating to the compressor acquired by the defendant incident to that relationship could not be appropriated by him. In that case, as in the present case, plaintiff obtained a patent during the course of the trial. The defendant argued that since plaintiff's process was revealed by the patent the process could not be regarded as a trade secret. The court held that the public disclosure of plaintiff's process did not remove defendant's duty not to exploit the economic advantage gained through the information initially disclosed to him by plaintiff. We see no essential difference between the facts in the Hyde case and the case at bar.

McKinzie: 252 P.2d 564 (Or. 1953)

The principles applied in the foregoing cases have been recognized by this court. In *McKinzie v. Cline*, the plaintiff employed the defendants to manufacture a gun swivel which one of the plaintiffs had invented. The defendants discontinued manufacturing the swivel for the plaintiffs and proceeded to manufacture and sell it for their own account. It was held that defendants violated a confidential relationship which existed between the parties and that therefore plaintiffs were entitled to an injunction and damages. In that case, as in the present one, plaintiffs had placed their product on the market and had discussed its manufacture with various machinists. The court

noted that there was no "evidence in the record that anyone other than defendant Cline and the plaintiffs had any knowledge of the inside workings of the gadget." The court went further and held that even though others might have become acquainted with the manufacturing process this would not entitle the defendants to violate the confidence reposed in them by the plaintiffs. With respect to this point, defendants in the present case argue that the *McKinzie* case is distinguishable from the case at bar in that the mechanism of the gun swivel was complex, whereas the mechanism of the garbage truck was not. The evidence does not support this contention. The description of the packer mechanism, particularly the manner in which the blade was attached (the proper adjustment of which was one of the principal improvements claimed by plaintiff), would indicate that it was of such complexity that more than a general inspection of the unit would be required to reveal the secret of plaintiff's improvements. The *McKinzie* case followed the line of authority previously discussed which de-emphasizes the elements of secrecy and novelty and stresses the breach of the confidential relation between the parties. The court adopted the higher standard of commercial ethics to which we have already alluded:

> If our system of private enterprise on which our nation has thrived, prospered and grown great is to survive, fair dealing, honesty and good faith between contracting parties must be zealously maintained; therefore, if one who has learned of another's invention through contractual relationship, such as in the present case, takes unconscionable and inequitable advantage of the other to his own enrichment and at the expense of the latter, a court of equity will extend its broad equitable powers to protect the party injured.

We reaffirm this declaration of business ethics and hold that defendant Kuhnau violated his duty to plaintiff by appropriating the information derived through their business relationship.

Defendants contend that there was no proof that their product contained the improvements alleged to have been developed by plaintiff. There is evidence that the plaintiff's and defendants' trucks were similar in structure and design. The trial judge, who inspected the trucks, concluded that defendants' trucks used the improvements developed by plaintiff. Where a person develops a product similar to that developed by his discloser, the proof of similarity may be sufficient to impose upon the disclosee the burden of proving that there was no misappropriation. *Hoeltke v. C.M. Kemp Mfg. Co.* stated: "The similarity of defendant's device to that of complainant is strong proof

Hoeltke: 80 F.2d 912 (4th Cir. 1936)

that one was copied from the other; for it is hardly probable that different persons should independently of each other invent devices so nearly similar at so nearly the same time." In the same case the court said that "one who admittedly receives a disclosure from an inventor, proceeds thereafter to manufacture articles of similar character, and, when called to account, makes answer that he was using his own ideas and not the ideas imparted to him" must sustain his position by proof that is "clear, satisfactory, and beyond a reasonable doubt." We are of the opinion that there was sufficient evidence to support the conclusion that defendants appropriated plaintiff's improvements.

3 Secondary Infringement

If a vice-president at MatrixCorp receives an email from someone calling himself Cypher offering to provide details of a computer graphics technology similar to one used by its competitor NeoCorp, can he take the deal? A moment's thought should suggest that the answer depends on how Cypher obtained the information and on what MatrixCorp knows about it. What about MatrixCorp's customers? Do they need to worry that their widgets were produced using a misappropriated trade secret?

Uniform Trade Secrets Act

§ 1
Definitions

(2) "Misappropriation" means:

(i) 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

(ii) disclosure or use of a trade secret of another without express or implied consent by a person who

(A) used improper means to acquire knowledge of the trade secret; or

(B) at the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was

(I) derived from or through a person who had utilized improper means to acquire it;

(II) acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use; or

(III) derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use; or

(C) before a material change of his [or her] 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.

F Defenses

The two most significant "defenses" to trade secret infringement are independent discovery and reverse engineering. I put "defenses" in quotation marks to emphasize that neither adds anything to the doctrines you have already seen. The defendant who establishes that she independently came up with the same information has actually defeated a crucial element of the plaintiff's case-in-chief: that the defendant stole the information *from the plaintiff*.

For more, see *Grynberg*.

Similarly, the usual definitions of "improper means" simply exclude reverse engineering: the plaintiff who proves only that the defendant reverse engineered her product has again failed to show an act of misappropriation. Reverse engineering is conventionally defined as "starting with the known product and working backward to divine the process which aided in its development or manufacture." *Kewanee Oil Co. v. Bicron Corp.* Courts sometimes add that the "known product" must have been obtained lawfully: it is no defense to argue that you reverse engineered the widget-making-machine you stole from your competitor's factory.

Kewanee: 416 U.S. 470 (1974)

Why allow reverse engineering? For one thing, it reflects a policy of recognizing personal property owners' rights over their things. If you buy it, you can break it down. Reverse engineering also promotes the same values as trade secret law itself. In the words of the Supreme Court, it is "an essential part of innovation" that "often leads to significant advances in technology." *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*

Bonito Boats: 489 U.S. 14 (1989)

Questions

1. In 2007, the New England Patriots football team videotaped the hand signals used by coaches for the New York Jets to send instructions to players on the field. Anyone in the stadium with a clear line of sight is able to see the signals. The National Football League's rules allow for such videotaping, but only from specific areas not including the areas the Patriots taped from (which had better views). ***Did the Patriots misappropriate a trade secret?***
2. In 2011, the Houston Astros baseball team hired Jeff Luhnow as their new general manager. Previously, Luhnow had been an executive with the St. Louis Cardinals. While with the Cardinals, Luhnow and others build an extensive database with detailed statistical information about players and reports on

prospective hires. When Luhnow moved to the Astros, several Cardinals employees went with him. Other Cardinals employees suspected that Luhnow might have helped design a similar database for the Astros. They guessed that he and the other ex-Cardinal employees might have used the same passwords for the new Astros system, a guess that turned out to be correct. The Cardinals employees logged into the Astros system using these passwords and examined some of the information in it. ***Identify all of the trade secret issues these facts raise.***

Flaming Moe's Problem

Based on *Mason v. Jack Daniel Distillery*, 518 So.2d 130 (Ala. Ct. Civ. App. 1987)

Moe Szyslak is the owner of Moe's Tavern, where the specialty drink is a "Flaming Moe." Moe mixes the drinks in a back room, then sets them on fire in front of customers.

1. Representatives from Tipsy McStagger's Good-Time Drinking and Eating Emporium meet with Moe to discuss licensing the recipe. As part of the negotiations, Moe tells them how it's made. Tipsy McStagger's breaks off talks and start selling its own version. ***What result?***
2. A Tipsy's employee orders a Flaming Moe, pours it into a thermos, and uses a gas chromatograph to analyze its chemical composition. By so doing, he learns that the secret ingredient is cough syrup. ***What result?***
3. A Tipsy's employee goes to Moe's Tavern and bribes a bartender to tell her the formula. ***What result?***
4. Same facts as before, except that anyone who tastes the drink can recognize that it's cough syrup. The Tipsy's employee still bribes the bartender to tell them. ***What result?***
5. Woud Moe be better off trying to patent the formula for the Flaming Moe? Would society be better off if he did?

Locksmiths Problem

Based on *Chicago Lock Co. v. Fanberg*, 676 F.2d 400 (9th Cir. 1982)

You represent the Chicago Lock Company, whose "Ace" series of locks is used in vending machines, burglar alarms, and other high-security settings. Ace locks use an unusual cylindrical key that requires specialized equipment to cut. Each lock has a serial number printed on it; the company uses a secret formula to translate the configuration of tumblers inside the lock into a serial number. The company's policy is that it will sell replacement keys only to the registered owner of a lock with a given serial number. All Ace locks and keys are stamped "Do Not Duplicate."

For years, locksmiths have known how to analyze Ace locks. After a few minutes poking at the lock with their tools, they can write down

the configuration of pins and tumblers inside the lock. They can then go back to their toolkits and grind a replacement key, which will open the lock. If the locksmiths keep the configuration information on file, they can grind replacement keys in the future without needing to go back to the lock and analyze it again. Individual locksmiths have, for years, kept such files for their local customers.

Recently, Morris and Victor Fanberg, two locksmiths, published a book entitled "AA Advanced Locksmith's Tubular Lock Codes." They asked locksmiths around the country to send them lists of Ace lock serial numbers and the corresponding tumbler configurations. Based on that information, they were able to program a computer to reconstruct Chicago's secret formula. The book contains a table that shows how to turn an Ace serial number into a key configuration, which any locksmith with the proper equipment could then use to cut a key opening the lock with that serial number.

Because the serial numbers on Ace locks are frequently printed on the outside, Chicago is concerned that the publication of this book will undermine the security of Ace locks. It has asked you whether it can and should sue the Fanbergs for damages and to halt publication of the book. What is your advice? Is there anything further it would be helpful for you to know? Are there changes that Chicago Lock can and should make to its procedures in the future?