UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

PATRICIA FERRARO,)	
Plaintiff,)	No. 08 CV 03638
v.)	
HEWLETT-PACKARD CORPORATION,)	Judge Edmond E. Chang
Defendant.)	

MEMORANDUM OPINION AND ORDER

Plaintiff Patricia Ferraro filed this product-liability suit against Best Buy and Hewlett Packard, seeking damages under common law theories of strict liability and breach of the implied warranty of merchantability. R. 31. Defendant Hewlett Packard has moved for summary judgment on both claims. R. 84. As explained below, Hewlett Packard's motion for summary judgment is granted.

T.

On May 17, 2006, Patricia Ferraro was using her Hewlett Packard (HP) laptop when she noticed that the low battery light turned on. R.85 \P 2. She then shut the laptop down and plugged the power adapter into the wall. Id. \P 3. In this product liability suit, a detailed description of the power adapter is necessary to understand this opinion. The power adapter is shaped like a brick: it is enclosed by black plastic

¹Citation to the record is "R." followed by the docket entry. The Court has subject matter jurisdiction over her claims based on diversity jurisdiction. *See* 28 U.S.C. § 1332.

 $^{^2\}mbox{Earlier}$ in the litigation, Ferraro agreed to entry of judgment in Best Buy's favor. R. 107.

and is 4¼ inches long, 1¾ inches wide, and 1½ inches high. R.85, Exh. G at 2. After plugging it in, Ferraro placed the adapter on the left arm of the couch she was sitting on. R. 85 ¶ 4. A laptop power adapter is designed to house a transformer, which converts alternating current—power that is supplied by the wall—into direct current, which is the kind of energy used by the laptop itself. R. 85, Exh. G at 2. One end of the adapter is permanently connected to a cord that connects with the computer, while the other end has a detachable cord that can be connected to a standard wall outlet. *Id.* at 2. A label is attached to the bottom of the adapter, but there are no labels anywhere else on the enclosure. *Id.*

After Ferraro placed the power adapter on the arm of the couch, she fell asleep. R.85 ¶ 4. When she woke up seven hours later, she noticed that her arm was now resting on the adapter—it had fallen off the arm of the couch and ended up in contact with her skin. R.103 at 4. More alarmingly, she noticed that her right forearm was covered with blisters. R.85 ¶ 4. Ferraro was later diagnosed with second- and third-degree burns and now suffers from permanent scarring. R.103 at 4.

Ferraro filed suit against Best Buy, which had sold her the laptop, and against HP, which had manufactured the laptop. Her complaint alleged negligence, strict liability, and breach of implied warranty of merchantability. R.1, Exh. A. The defendants removed the case to federal court. R.1. On May 16, 2008, Ferraro filed an amended complaint, which included only two claims against HP: strict liability and breach of implied warranty of merchantability. R. 31. Discovery followed, including expert discovery offered by both HP and Ferraro. HP has filed a motion for summary

judgment on all claims against it (as noted above, *supra* at 1 n.2, Ferraro agreed to entry of judgment in Best Buy's favor, R. 107).

II.

Summary judgment must be granted if "the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). In determining whether there is a genuine issue of fact, the Court "must construe the facts and draw all reasonable inferences in the light most favorable to the nonmoving party." *Foley v. City of Lafayette*, 359 F.3d 925, 928 (7th Cir. 2004).

To avoid summary judgment, the opposing party must go beyond the pleadings and "set forth specific facts showing that there is a genuine issue for trial." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 250 (1986). A genuine issue of material fact exists if "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Id.* at 248. The party seeking summary judgment has the burden of establishing the lack of any genuine issue of material fact. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). Summary judgment will be granted against "a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." *Id.* at 322. The non-moving party "must do more than simply show that there is some metaphysical doubt as to the material facts." *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986). In other words, the "mere existence of a scintilla of evidence in

support of the [non-movant's] position will be insufficient; there must be evidence on which the jury could reasonably find for the [non-movant]." *Anderson*, 477 U.S. at 252.

III.

Before analyzing the legal theories, and how they fit (or do not fit) with the facts, it is worth detailing the proffered evidence of the six expert witnesses disclosed in discovery. Ferraro has presented three experts: Peter Poczynok, Nathaniel Johnson, and Dr. Robert Cucin. HP has also presented three experts: Dr. Raphael Lee, Don Galler, and Raina Shah.

A. Peter Poczynok

Poczynok is a mechanical engineer who is employed by ARRCA, a litigation consulting firm, as a Regional Vice President and Senior Mechanical Engineer. R.85 ¶ 16. For this case, Poczynok examined the power adapter, reviewed deposition transcripts, and read HP manuals. After reviewing all of these materials, he concluded that HP should have either provided a heat warning in the product documentation or on the adapter or alternatively, HP could have designed the adapter differently to reduce the amount of heat it generated. *Id.* ¶ 17.

Poczynok testified that HP should have foreseen that the power adapter could cause burns on potential users. R.85, Exh. H (Poczynok Dep. at 127–128). He noted that the Safety and Comfort guide included language that implied that HP anticipated situations where the power adapter would not have sufficient air circulation. *Id.* at 130. According to Poczynok, HP should have placed more warnings in the laptop's manuals and product documentation. *Id.* at 129–130. Specifically, he notes that there

are three places where HP could have warned consumers: in the Getting Started manual, in the Safety and Comfort Guide, and on the adapter itself. R. 85, Exh. G at 3.

Poczynok stated that the warning should "identify the hazard, communicate the consequences of coming into contact with the hazard, provide methodologies for avoiding the hazard, and prescribe countermeasures, if any." *Id.* Such a warning must be readily visible to the consumer and alert the user to the hazard in time to take "appropriate action." *Id.* He cited ANSI Z535, a standard used for on-product warnings, as an appropriate standard HP should have followed for an effective warning. Poczynok Dep. at 128–129.

Poczynok also explained that the power adapter also had a design defect. *Id.* at 139–140. He proposed four different design alternatives. First, instead of placing the transformer in the adapter itself, HP could have designed the laptop so that the transformer would be housed inside the laptop itself instead of being housed in an external power adapter. *Id.* at 140. Second, the external power adapter could have included an active cooling device (he suggested a fan) in order to vent any excessive heat buildup. *Id.* Third, the adapter could have included a heat shield. *Id.* at 140–141. Fourth, HP could have made the box housing the adapter larger, so there would be more room for air inside. That air would serve as a buffer between the transformer and the plastic housing material and therefore reduce the temperature of the adapter. *Id.* at 141.

B. Nathaniel Johnson

Mr. Johnson is an electrical engineer who has worked with transformers and electrical power supplies. His testimony concerned the burn potential of a product and the amount of time it takes to cause a burn. R.85 ¶ 24.

Johnson conducted tests of the power adapter and measured the adapter's surface temperature as time went on. R.85, Exh. I at 3. The adapter was placed on top of two layers of cotton sheet material. *Id.* Throughout the test, Johnson measured the temperature of the adapter by placing two temperature measurement devices—one on top, one underneath—on the adapter. *Id.* Approximately 1½-hours into the test, he placed a shop towel over the adapter, and noted the temperature changes. *Id.* Three hours later, he removed the towel and continued to measure the temperature. *Id.*

Johnson recorded the temperatures at 1½-hour intervals, and observed that the underside of the adapter consistently remained 18° Celsius warmer than the top of the adapter. *Id.* During the test, the adapter reached 58.5° Celsius after an hour and a half, and 77.2° Celsius after the top was covered with a towel. *Id.*

From the test results, Johnson derived four conclusions. First, the adapter presented a "severe burn hazard when energized and operating at 95% of full load if the unit is in contact with unprotected skin when the opposite surface is in contact with a normal tabletop with two layers of bed sheet material." *Id.* He noted that standard practice in the United States is that hot water delivery is limited to 60° Celsius. *Id.* at 4.

Second, Johnson concluded that when the adapter has no free airflow at both the top and bottom portions of the unit, it presents an extreme hazard. *Id.* The temperatures reached as high as 77° Celsius—which could cause severe burns after a few minutes. *Id.* Johnson then used a chart used in a British safety standard regarding temperature limits for hot surfaces. *Id.* He explained that an object that is 74° Celsius is safe for four seconds; 70° Celsius for ten seconds; and 48° Celsius for ten minutes. *Id.* Based on this chart, Johnson concluded that if the adapter was 58.5° Celsius, it could burn a normal adult's skin within ten minutes. *Id.*

Third, Johnson concluded that the burns suffered by Ferraro was consistent with how anyone might use the power adapter. *Id*. He explained that the adapter lacked any markings that warned that the adapter should be used in a way that all surfaces are uncovered and free air could flow all around it. *Id*. Johnson also explained that it is common practice for consumers to use laptop computers in bed or on a couch, and that a user may easily fall asleep during use. *Id*. at 5.

Fourth, Johnson suggested that the 6-foot long power cord be shortened, in order to reduce the likelihood of a user coming into physical contact with the adapter. *Id.* A shorter cord would also reduce the chances of the adapter being subject to restricted airflow. *Id.* Johnson suggested that the cord connecting to the laptop could be lengthened, to make up for the shortened cord that connects to the wall outlet. *Id.* He noted that Kensington, an independent power supply manufacturer, makes power adapters with this design. *Id.*

C. Dr. Robert Cucin

Dr. Cucin is a plastic surgeon who is board certified in general surgery and plastic surgery. R. 106, Exh. I (Cucin Dep. at 9). Although he does not specialize in a specific area of plastic surgery, he does remedial work for burn victims. *Id.* at 9 10. Cucin testified that skin begins to burn after it has been placed for fifty minutes on a surface that is 50° Celsius. *Id.* at 134. He also testified that some burns that occur when the victim is sleeping do not involve the victim being under the influence of drugs (and thus less responsive to pain). *Id.* at 137. He specifically cited examples of victims who were burned on sleeping pads. *Id.* at 137. Cucin also indicated that many people consume alcohol or take medications that would affect their pain sensitivity or withdrawal instinct. *Id.* at 138. Cucin also testified that sometimes, people will incorporate "pain into their dreams and may not wake up from it right away." *Id.* at 139.

D. Dr. Raphael Lee

Dr. Raphael Lee is a professor at the University of Chicago who is a board certified surgeon specializing in plastic surgery and burn care. R. 104 ¶ 12; R. 106, Exh. G (Lee Dep. at 4). Lee testified in his deposition that a person, under normal physiological circumstances, would very quickly withdraw their skin from the heat at issue in this case. R.85, Exh. F at 12. He further testified that a skin temperature of 46° Celsius is associated with severe pain and a temperature of 52° Celsius is associated with a second-degree burn injury. *Id.* ¶ 13.

Lee explained that he ran a test with an exemplar power adapter and a "phantom" human arm to simulate the thermal behavior of human skin and the subcutaneous tissue. *Id.* ¶ 14. (The phantom arm was comprised of a gel to mimic the thermal behavior of skin. The gel heats more rapidly than a real human forearm, which (from HP's perspective) made the test more conservative in how much time it would take for the power adapter to become painfully hot. R. 85, Exh. F at 7-8.) Lee placed the phantom arm on the power adapter to mimic Ferraro's forearm on the power adapter and raised the temperature to 79° Celsius in order to simulate the worst case scenario. R. 85 ¶ 14. Lee observed that when the phantom arm was placed in contact with the adapter casing, it took 7½ minutes for the arm surface to reach 46° Celsius. R. 85, Exh. F at 12.

As a result of the experiment, Lee drew four conclusions. First, by the time the surface temperature reached 46° Celsius, the person would have felt severe pain. *Id.* Second, under normal physiological conditions, contact with the adapter at 79° Celsius would cause a person to feel tremendous pain within one minute. *Id.* Third, normal involuntary spinal reflexes would cause withdrawal of the skin from the source of the pain in a matter of seconds. *Id.* Fourth, Plaintiff Ferraro would have felt severe pain within 5 minutes or less and would have received a deep burn injury to her skin after 10 minutes or more. *Id.* According to Lee, given how the spinal reflex causes a person to withdraw within seconds of feeling such intense heat, the power adapter was unlikely to cause severe burns under normal physiological conditions. *Id.*

E. Don Galler

Don Galler is an electrical engineer retained by HP to examine the adapter to see if it was defective. R. 85, Exh. D. Galler explained, in his report, that the relevant standard for the HP power adapter was UL/IEC (Underwriter's Laboratory / International Electrotechnical Commission) 60950. *Id.* at 2. HP has placed a UL/IEC 60950 logo on the adapter because it meets an international standard for safety. The standard dictates that the "maximum allowable temperature" at which the "external surfaces of equipment [may] be touched" is 95° Celsius. *Id*.

Galler tested the adapter by charging a dead battery on a laptop. When he covered the adapter with a piece of cloth, the adapter reached a high temperature of 80° Celsius. *Id.* Because it never rose above 95° Celsius, Galler concluded, the adapter met the UL/IEC 60950 standard. Galler also presented the UL safety standards for several other products and notes that they range from 85° Celsius to 100° Celsius. *Id.* From these high temperatures, Galler inferred that the UL does not expect that these products will be in continuous contact with a person's body. *Id.*

Galler also rebutted Johnson's testimony that the British standard for the maximum hot-water temperature should set the maximum temperature of a plastic power adapter. First, Galler explained, the "specific heat" of water is over three times greater than the "specific heat" of plastic. *Id.* at 2-3. That is, water holds more than 3 times the energy (assuming same temperature and mass) as plastic, and thus it is easier to be burned by water than the plastic housing of the adapter. *Id.* at 3. Second,

heat transfer between a solid and liquid (skin and water) is more efficient than heat transfer between two solids (skin and plastic). *Id*. Thus, it is easier to receive a burn from water at a lower temperature than a solid at that same temperature. *Id*. Accordingly, Galler opined that "[t]he standard cited by Mr. Johnson does not apply because the underlying physics are different." *Id*.

F. Raina Shah

Ms. Shah is a Human Factors Engineer with Applied Safety and Ergonomics, Inc., R. 85 ¶ 11, an expert witness and consulting firm. She is also a Certified Product Safety Manager and a Certified Professional Ergonomist. R. 85, Exh. E at 11. According to Shah, HP was not required to warn users about the heat produced by the adapter. R. 85 ¶ 11. She noted that the UL/IEC standards recognizes a need for warnings "under certain circumstances, but not for this type of product." *Id.* at 6.

Shah compiled a list of laptops made by other manufacturers and noted that most manufacturers did not include any warnings about heat. *Id.* at 6–7. Shah also explained that even if the adapter were to be surrounded on all sides, it would not reach temperatures that could cause burns immediately on contact—it would still take at least several minutes of continuous contact. *Id.* at 8. Therefore, a person would have to maintain contact with the adapter continuously, for several minutes, in order to sustain a third-degree burn. *Id.* She explained four reasons why such continuous contact is unlikely to occur. *Id.*

First, the adapter was designed in a way that it should be placed on a flat surface, like a floor or a desk. *Id.* Second, the adapter is unlike a heating pad or heated blanket because it is rectangular. She explained that a person "could not be expected to knowingly sustain continuous contact with the adapter." *Id.* Third, even if a person inadvertently came into contact with a hot adapter, they would immediately cease contact "upon experiencing the discomfort or pain that would precede a third degree burn." *Id.* And fourth, there is a lack of history of severe burns associated with the HP laptop power adapter. *Id.* Based on these factors, Shah reported that there was no need to include a warning regarding the heat generated by the adapter. *Id.*

VI.

A. Strict Liability

To succeed on a strict products liability claim, the plaintiff must establish five elements: "(1) a condition of the product as a result of manufacturing or design, (2) that made the product unreasonably dangerous, (3) and that existed at the time the product left the defendant's control, and (4) an injury to the plaintiff, (5) that was proximately caused by the condition." *Mikolajczyk v. Ford Motor Co.*, 901 N.E.2d 329, 345 (Ill. 2008). The plaintiff has the burden of proof for each element. *Id.* Here, HP does not dispute elements 1, 3, and 4, and instead focuses on Ferraro's assertions that the AC adapter was unreasonably dangerous and was the proximate cause of Ferraro's injuries.

1. Unreasonably Dangerous

A product is unreasonably dangerous if the danger is due to (1) a manufacturing defect, (2) a design defect, or (3) a failure to warn consumers of a danger posed by the product of which the average consumer would not already be aware. Salerno v. Innovative Surveillance Technology, Inc., 932 N.E.2d 101, 108 (Ill. App. Ct. 2010) (citing Mikolajczyk, 901 N.E.2d 329). Ferraro does not make a manufacturing defect claim but instead bases her claim on a design defect and on a failure to warn. To demonstrate a design defect, Ferraro may take one of two approaches: the consumer-expectations test or the risk-utility test. Sobczak v. General Motors Corp., 871 N.E.2d 82, 92 (Ill. App. Ct. 2007).

a. Consumer Expectations

Under the consumer expectations test, a product is unreasonably dangerous when it is "dangerous to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics." Sobczak, 871 N.E.2d at 92. Ferraro argues that no consumer would expect that any component of a new laptop computer, including the power adapter, would heat up to a temperature that would cause blisters and second-degree burns. In describing this argument, Ferraro's response brief suffers from a lack of specificity. Here is how the response puts the argument in the 3 times it is mentioned, and each time there is no citation to evidence that might provide more specifics:

No consumer would expect that any component of a brand new laptop computer would heat up so intensely as to cause blistering and second and third degree burns. R. 103 at 4.

No ordinary consumer would expect to receive severe burns from an AC adapter, as discussed previously. R. 103 at 7.

An ordinary consumer would have no expectation that the AC adapter would cause significant burns. R. 103 at 9.

Nor did Ferraro submit any additional statements of disputed material facts, as she was required to under Local Rule 56(b)(3)(C), if she wished to present additional evidence beyond what was contained in her responses, see R. 104, 105 (Ferraro's Local Rule (b)(3)(B) response and a supplement), to HP's statement of facts. Rather than compel the opposing party and the Court to root around (although the Court did do that) Ferraro's en masse filing of exhibits, R. 106, Ferraro should not be allowed to scan and upload all her evidence onto the docket without specifying precisely what she relies on in responding to HP's summary judgment motion. Ferraro's response brief unfortunately makes arguments at a very high level of generality.

Ferraro most likely is arguing that an ordinary consumer would not expect that the adapter would cause a burn under *any* set of conditions—including if the user maintains contact with the adapter at 50° Celsius for around 50 minutes, which could cause a second-degree burn. *See* Cucin Dep. at 134-36. But that argument does not fit the consumer expectations theory of liability. Under that approach, Ferraro must show (or, at the summary judgment stage, must show that a reasonable factfinder could find) that the adapter "failed to perform as safely as an ordinary consumer would expect when *used* in an intended or reasonably foreseeable manner." *Lamkin v. Towner*, 563

N.E.2d 449, 457 (III. 1990) (emphasis in original).³ In *Lamkin*, the Illinois Supreme Court held that the maker and retailer of a window screen were not liable, under the consumer expectations test, for failing to prevent a person from falling through the screen. *Id.* at 457-58. The Illinois Supreme Court reasoned that even though perhaps a screen could sometimes prevent a fall, that prevention was not the *use* for which it was intended or a use that was "foreseeabl[y] similar" to the intended use. *Id.* at 458; *see also Mikolajczyk*, 901 N.E.2d at 336 ("The danger arose only when the window screen did not do something it was not designed to do.") Here, Ferraro might be arguing that it is reasonably foreseeable that a laptop user might fall asleep while using the computer, and thereby maintain contact with the adapter for a prolonged time, enough to cause a burn. But that is not the intended use of a power adapter (powering the laptop and charging its battery), nor a use that is foreseeably similar to its intended use.⁴

Perhaps Ferraro is making the more limited argument that an ordinary consumer would expect that the power adapter would not get so hot that it would *instantaneously* cause a burn. That version of Ferraro's argument is important because if Ferraro had admissible evidence that the adapter, even when properly ventilated,

 $^{^3}$ Other recent cases have affirmed the grant of summary judgment in products liability cases. See Henry v. Panasonic, 917 N.E.2d 1086, 1093 (Ill. App. Ct. 2009); Salerno v. Innovative Surveillance Technology, 932 N.E.2d 101, 111 (Ill. App. Ct. 2010).

⁴Ferraro's expert, Dr. Robert Cucin, tried to draw an analogy between the power adapter and heating pads. But no reasonable factfinder could rely on that analogy. Heating pads are designed for extended physical contact with the pad. R. 85, Exh. E (Raina Shah Report) at 7. In contrast, the power adapter is designed to rest on a flat surface, not on a person's skin.

could get so hot that a person could instantly with no chance to withdraw contact get burned by touching it, then she likely would have survived summary judgment and been entitled to have a jury decide whether the adapter was unreasonably dangerous. But Ferraro does not point to evidence that supports that argument. The only specific temperature that she mentions in her response brief is 80° Celsius. R. 103 at 5 ("According to Robert Cucin, M.D., a plastic surgeon retained by plaintiff, it was well known in the scientific community at the time the computer and AC adapter were put into the stream of commerce that a temperature of 80 degrees would produce second degree burns to human skin. Exh. I at 134.") The cited deposition testimony does not support the proposition that an 80° Celsius plastic adapter would instantly cause a burn; indeed, the cited testimony does not mention that temperature at all. See R. 106, Exh. I (Cucin Dep.) at 134. Other pages of testimony do mention 80° Celsius as a temperature that would produce a burn, R. 106, Exh. I (Cucin Dep.) at 125, 135, but there is no testimony that the burn would be instantaneous. Most significantly, the expert whom Ferraro cites, Dr. Robert Cucin, admitted that he could not testify that the burn would be instantaneous:

- Q: All right. I just want to make sure that I'm clear that at this point you cannot point to any literature or studies that you say that this adapter, transformer, 80 degrees, if she touches it, she can get an instantaneous burn?
- A: No, I can't because I don't know anything about the adapter.

R. 106, Exh. I (Cucin Dep.) at 126. That concession is fatal to Ferraro's attempt to proceed on the otherwise viable theory that an ordinary consumer would not expect an instantaneous burn from the adapter.⁵

On top of that concession by Ferraro's expert, HP presented the report and testimony of Dr. Raphael Lee, who opined that under "normal physiological conditions," a person's withdrawal reflexes would cause that person to immediately (within seconds) pull away from a power adapter at a temperature of 79° Celsius. R. 85, Exh. F at 12. Lee further testified that a person, even if asleep, would not lie there and suffer an irreversible burn injury without waking up under normal physiological circumstances. R. 106, Exh. G at 121-23, 125, 160-61. In other words, sleep might cause some delay in the withdrawal reflex, but would not delay it to the point of "a damaging level of injury." R. 106, Exh. G. at 121, *id.* at 122. Ferraro presented nothing to rebut this evidence.

It is worth making clear, however, that the Court is *not* holding that Ferraro was, as HP argues, under the influence of a painkiller at the time of the injury. It is

⁵As described above, another of Ferraro's experts, Nathaniel Johnson, tried to rely on the British standard for the maximum hot-water temperature used in households as the maximum temperature of a plastic power adapter. But Johnson did not know the author of the article from which he learned of the British standard, nor could he provide any information about the standard. R. 105 ¶¶ 25-27. And (as also explained above) HP's expert, Don Galler, explained that water holds more than 3 times the energy (assuming same temperature and mass) as plastic, and thus it is easier to be burned by water than a plastic adapter. Moreover, heat transfer between a solid and liquid (skin and water) is more efficient than heat transfer between two solids (skin and plastic), and that too makes it easier to receive a burn from water than plastic at the same temperature. Additionally, Johnson is an electrical engineer, and conceded that a doctor is in the best position to test the time it takes to cause a burn. R. 105 ¶ 24.

true that Ferraro did have a prescription for painkillers during the time period of the injury. R. 104 ¶ 6. HP insists that, at her deposition, Ferraro was non-committal about whether she took pain killers on the night of the incident. R. 85 ¶ 7. Ferraro denies that she was non-committal and insists that she has always stated that she did not take any pain killers that night, R. 104 at 4, as shown by this transcript excerpt:

- Q: Were you on Vicodin the night of the incident?
- A: No.
- Q: How do you know?
- A: Because when I take it, I take it right before I get into bed because it kind of makes you sleepy.
- Q: What about on a night like the night of the incident when you don't actually go to bed but you fall asleep?
- A: No. I wouldn't have taken it because I would have to had to get up and walk in my bedroom and get it.
- Q: Do you recall walking into your bedroom at any time?
- A: No.
- Q: Do you recall not walking into your bedroom?
- A: Yes. I did not go into my bedroom.
- Q: So a toxicology report from the night of the incident would not reflect you had Vicodin in your system?
- A: I [sic] would depend. I know they are in your system for a while. I'm not really sure, but it could have.
- Q: When was the last time you took Vicodin before the incident?
- A: I don't recall.

Q: Was it within 24 hours?

A: I don't know. I don't recall.

Q: Is it possible?

A: Anything is possible.

Q: Was it within 12 hours?

A: I don't recall.

Q: So it's possible that you took Vicodin within 12 hours leading up to the incident?

A: Again, anything is possible.

R. 85, Exh. A (Ferraro Dep. at 79 80).

Reading the deposition testimony in context demonstrates that Ferraro was firm in denying using painkillers on the night in question. She twice flat-out denied using Vicodin during that night. She even testified as to her practice of taking Vicodin only when she goes to bed in her bedroom (remember that the injury took place on her couch). So Ferraro did not, as HP argues, profess a "lack of recollection as to the use of pain-killers" on the night in question. R. 84 at 7. To be sure, Ferraro allowed that "anything is possible," when asked whether it was "possible" that she had taken Vicodin in the past 12 to 24 hours. But "anything is possible" is hardly the type of

⁶"Anything is possible" is literally true, but Ferraro's concession of that principle does not mean that she conceded that the possibility actually occurred. *Cf. United States v. Ytem*, 255 F.3d 394, 397 (7th Cir. 2001) ("*Anything* is possible; there are no metaphysical certainties accessible to human reason . . .") (emphasis in original); *United States v. Davis*, 48 F.3d 277, 279 n.1 (7th Cir. 1995) ("anything is possible in this strange and wonderful world"); *United States v. Nagib*, 44 F.3d 619, 625 (7th Cir. 1995) ("Anything is *possible*. The moon may be made out of green cheese after all.") (emphasis in original).

cross-examination admission that establishes Ferraro had taken Vicodin that night, especially where the facts must be viewed in the light most favorable to *her* at this stage in the litigation. Notwithstanding the jury question on this particular issue, however, for the reasons described above, HP is entitled to summary judgment on the consumer expectations liability-theory because no reasonable jury could find that the power adapter was unreasonably dangerous for its intended (or foreseeably similar) use.

b. Risk-Utility Test

Even if a plaintiff cannot establish that the product was unreasonably dangerous under the consumer expectations test, she can still prevail under the risk-utility test. Calles v. Scripto-Tokai Corp., 864 N.E.2d 249, 256 (Ill. 2007). "Under the risk-utility test, a plaintiff must demonstrate that a design defect exists by presenting

⁷HP also argues that the testimony of Ferraro's doctor provides unrebuttable evidence that Ferraro's physiology was abnormal at the time of the incident. R. 108 at 6. Dr. Chandrarekha Kaza testified that he had referred Ferraro to a pain clinic because she had been using painkillers for a very long time. R. 85, Exh. B (Kaza Dep. at 67). That is not the equivalent of testimony that her physiology was so abnormal that Ferraro must have been on Vicodin when she was burned. Nor does Kaza's testimony establish that Ferraro took any painkillers on the night in question. And when asked whether a person on painkillers could open up a wound and fail to wake up, Dr. Kaza responded that it "[d]epends on how many a person takes." *Id.* at 68.

The confusion likely stems from ambiguity in prior Illinois state court decisions. Some courts explain that the risk-utility test requires an analysis of proximate cause. *E.g., Lamkin, 563* N.E.2d at 457 ("A plaintiff may demonstrate that a product is defective in design . . . in one of two ways: (1) [the consumer expectations test] or (2) by introducing evidence that the product's design *proximately caused his injury* and the defendant fails to prove that on balance the benefits of the challenged design outweigh the risk of danger inherent in such designs.")(emphasis added). Other courts do not discuss proximate cause with respect to the risk utility test. *E.g., Duffy v. Togher*, 887 N.E.2d 535, 547 (Ill. App. Ct. 2008).

evidence that the risk of danger inherent in the design of the product outweighs the benefits of the design." Sobczak v. General Motors Corp., 871 N.E.2d 82, 92 (Ill. App. Ct. 2007) (citing Lamkin v. Towner, 563 N.E.2d 449 (Ill. 1990)). Illinois courts consider a broad range of factors, including "(1) the magnitude and probability of the foreseeable risks of harm, (2) the instructions and warnings accompanying the product, (3) the nature and strength of consumer expectations regarding the product, including expectations arising from product portrayal and marketing, [and] (4) the likely effects of the alternative design on production costs." Mikolajczyk, 901 N.E.2d at 352 (citing Restatement (Third) of Torts: Products Liability § 2, Comment f, at 23 (1998)); Duffy v. Togher, 887 N.E.2d 535, 547 (Ill. App. Ct. 2008).

Ferraro argues that the adapter presented an unambiguously foreseeable danger because it was a severe burn hazard. R.103 at 7. HP counters by making two arguments. First, it argues that the adapter met the relevant regulatory standards. R. 84 at 8. Second, it argues that to the extent the adapter was dangerous because it gets hot, that danger is obvious to the ordinary consumer. *Id.* at 7. Consumers are well aware that a device that relies on powering a laptop through electricity would get hot. *Id.* In fact, Ferraro's 13-year old daughter testified that, "on the night of the incident, she used the power adapter, felt it was warm, and told [Ferraro] about it." R. 85 ¶ 8.

- Q: Did you use the power did you find that the power cord was warm or hot or
- A: I found that it was hot when I would touch it . . .

- Q: Okay. Did you tell your mom how hot it was when you after you touched it?
- A: I had told her it was hot but I didn't really think it was a big deal that it was hot.
- Q: So before the incident, you told her it was hot. What did she say in return?
- A: She said that all of them got hot, because I guess I hadn't said how hot it had gotten. She just figured that it was regular.

R.85, Exh. C (A.M.⁹ Dep. 15:15 24; 16:5 14). According to Ferraro's daughter, Ferraro herself acknowledged that power adapters get hot.¹⁰

The foreseeability factors weigh in favor of HP. As discussed above, the magnitude of the danger was not severe because the evidence established that the adapter would not cause an instantaneous burn and that, under normal physiological conditions, a person's withdrawal reflex would cause the person to pull away from a hot adapter almost immediately, preventing any serious burns. With regard to foreseeability, Ferraro presents the testimony of HP employee Steven Ortmann, who testified that HP had received complaints about the power adapter temperature in the past. R. 103 at 4-5. But the complaints were that the adapters were simply too warm,

⁹For privacy purposes, Federal Rule of Civil Procedure 5.2(a)(3) requires redaction of a minor's name into the form of initials only.

¹⁰Ferraro's counterargument is that A.M. was talking about the cord, not the plastic power adapter itself. R. 103 at 6. After reviewing the deposition transcript, it is true that A.M. said the "cord" was hot. R. 85, Exh. C at 11. But viewed in context, the reference to the "cord" meant the power adapter. Indeed, A.M. was asked this clarifying question, "when we're talking about it got hot, are we talking about the – kind of the adapter brick part?," to which she answered, "Yes." R. 85, Exh. C at 28. Repeatedly, A.M. answered questions about the "adapter" as the item that got hot. R. 85, Exh. C at 28, 29, 30, 32. Furthermore, the item that "got hot" was described as the "black box," which describes the power adapter. R. 85, Exh. C at 16-17.

not that they caused any bodily harm or severe burns. In fact, there was no history of severe burns associated with the HP power adapter. R. 85, Exh. E at 8.

Ferraro also presents four different ways that HP could have chosen to design the power adapter so that it would be safer. Poczynok testified that there are four design alternatives: (1) housing the transformer inside the laptop; (2) the adapter could include a cooling device, such as a fan; (3) the adapter could include a heat shield; and (4) the plastic box that housed the transformer could be enlarged to allow more airflow inside the adapter. R. 103 at 7-8. But Ferraro did not present any evidence discussing the *feasibility* of any of these alternatives. Worse, one of Ferraro's other expert witnesses Nathan Johnson testified that adding a fan or a heat shield was *not* feasible. Johnson Dep. at 125-26. He also testified that putting the transformer in the laptop would not be practical. *Id.* at 126-28.

As another alternative design, Johnson proposed shortening the 6-foot long cord that connected the adapter to the wall outlet. R. 85 ¶ 28. He based his opinion on a power adapter manufactured by a company named Kensington. *Id.* According to Johnson, a shorter cord would prevent a power adapter from being placed on the user's lap. Johnson Dep. at 119. But Johnson did not provide any details on the design or testing of a power adapter with a shorter cord. Moreover, the Kensington adapter is itself not UL approved. R. 85 ¶ 28. The only evidence that Johnson cites is that other computer manufacturers have used short cords. That alone is not enough to show that an alternative design is feasible. *See Calles*, 864 N.E.2d at 264.

In sum, none of the risk-utility factors weigh in Ferraro's favor: not the magnitude and probability of the foreseeable risk, not the need for instructions and warnings (see below), not the consumer expectations of the product (see above), and not the feasability of alternative designs. Accordingly, the Court concludes that no reasonable jury could find for Ferraro (who bears the burden of proof) under the risk-utility test.

2. Failure to Warn

Ferraro also pursues a failure-to-warn claim. Generally, a duty to warn exists when there is unequal knowledge and the defendant has reason to know that harm might occur to the consumer if no warning is given. *McColgan v. Environmental Control Systems, Inc.*, 571 N.E.2d 815, 818 (Ill. App. Ct. 1991). The warning's purpose is to inform the consumer about a danger that she is not aware of, thus enabling her to take appropriate measures to protect herself. *Id.* However, "[n]o duty to warn arises where the risk of harm is apparent to the foreseeable user, regardless of any superior knowledge on the part of the manufacturer." *Sollami v. Eaton*, 772 N.E.2d 215, 221 (Ill. 2002).

The parties do not dispute that there were no warnings or instructions about a burn hazard anywhere on the laptop, power adapter, or instructions. Ferraro argues that HP had "a wealth of information available to it regarding the heat generated by its computers and the effect of heat on human skin." R. 103 at 9. An ordinary consumer, Ferraro contends, would have no expectation that the adapter could cause

severe skin burns. *Id*. In support of this argument, Ferraro cites Poczynok's deposition testimony:

- Q: Should they also have known about the temperatures at which their product can burn human beings before putting it into the stream of commerce?
- A: Yes, I believe they should have.
- Q: If you put those two things together, assuming that they had investigated that, isn't that evidence also of whether or not HP should have been aware of this problem?
- A: Yes.

Poczynok Dep. at 164.

As discussed above, it is true that the power adapter could reach temperatures that could cause burns—but only if contact was prolonged or if something was wrong with a person's withdrawal reflex. And, as Raina Shah testified, there was no history of burns caused by the power adapter; the only consumer complaints were that the power adapter got too warm, but no burns had been reported. No reasonable factfinder could conclude that HP had special knowledge of the adapter's propensity to burn consumers.

Ferraro also fails to show, even at the summary judgment stage, that the (eventual or abnormal) burn danger was non-obvious. Even Ferraro's 13-year old daughter was aware that the adapter could get hot, and warned Ferraro that it was hot. A.M. testified that Ferraro herself said that all power adapters "got hot." A.M. Dep. at 15–16. Ferraro does not deny making that statement to her daughter. Instead, Ferraro argues that she was not aware that the adapter could cause severe burns. But

an ordinary consumer would have known that prolonged or abnormal contact with a hot power adapter would eventually cause a burn. Because Ferraro has not met her burden of producing evidence that HP had unequal knowledge of the harm or that the danger was non-obvious, she has failed to demonstrate that HP had a duty to warn.¹¹

B. Implied Warranty of Merchantability

Ferraro's remaining claim is for breach of the implied warranty of merchantability. To succeed on such a claim, "a plaintiff must establish (1) a sale of goods, (2) that the seller of the goods is a merchant with respect to those goods, and (3) that the goods were not of merchantable quality." *Maldonado v. Creative Woodworking Concepts, Inc.*, 796 N.E.2d 662, 666 (Ill. App. Ct. 2003). HP argues that the claim fails because it requires a finding that the product was defective. R. 84 at 12 (citing *State Farm Fire & Casualty Co. v. Miller Electric Co.*, 562 N.E.2d 589, 595 (Ill. App. Ct. 1990)).

Ferraro concedes that, according to *State Farm*, a plaintiff show a product defect. But she argues that there is a split in the Illinois Appellate Courts on this issue. R. 103 at 12. Ferraro argues that *Malawy v. Richards Manufacturing* holds that demonstrating a product defect is not required to prove an implied-warranty claim. 501 N.E.2d 376, 383 (Ill. App. Ct. 1986). Ferraro does not present an actual argument as to why *Malawy* is, or should be, the controlling authority.

¹¹In light of Ferraro's inability to meet the elements of the strict liability and failure to warn claims, the Court need not address the element of proximate cause.

In any event, even if a product defect is not an element of an implied-warranty

claim, Ferraro cannot succeed on her specific implied-warranty claim. The claim

requires a showing that the goods were not of merchantable quality. A product that is

not of merchantable quality is one that is unfit for the ordinary purposes for which the

goods are used. Maldonado, 796 N.E.2d at 666. Here, a reasonable jury could not find

the adapter was unfit for its ordinary purpose. The power adapter's purposes are to

provide power to the laptop and to charge the laptop battery. Ferraro does not allege,

let alone provide evidence, that HP's power adapter was unfit in fulfilling that purpose.

She cannot succeed on a claim for breach of the implied warranty of merchantability.

V.

Because no reasonable jury could find for Ferraro, Hewlett Packard's motion for

summary judgment [R.84] is granted in its entirety.

ENTERED:

Honorable Edmond E. Chang

Edward E. Chang

United States District Judge

DATE: February 6, 2012

27