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Product Liability

An Interactive Qualifying Project Report

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Abstract:

This Interactive Qualifying Project studies the inter-workings of product liability law and its relationship with engineering. We will review three real product liability suits and read though two books about the trial system. The end of the project concludes with a mock trial based on the three cases reviewed. A jury of peers is asked to make the final judgment on the presentation of case materials. As a result of the project, there is a greater understanding of the engineering world.

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Chapter 1: Engineer in the Courtroom

Introduction:

The purpose of this book is to introduce the engineer to the legal system. What to expect, how to avoid common problems, what the steps are to each process and how to have a successful litigation.

The Nature Of Accidents:

Collision:

- a. Two moving machines or vehicles.
- b. A vehicle or machine hitting a fixed object
- c. A vehicle hitting a person
- d. A person running into another person

Slip and Fall Accidents

- a. Loss of traction between the foot and the surface
- b. Tripping
- c. Physical malfunction of the person
- d. Unexpected change in surface level
- e. Loss of step support
- f. Loss of balance and/or support of the body
- g. Fall from ladder or step

Loss of Control

a. Inadvertent motion

Hit By Falling Object

a. Hit by rolling object

Suffocation

a. Drowning

Electrocution

Poisoning

Shock and Vibration

Entanglement

Cuts and Abrasions

Fire

- a. Chemical burns
- b. Explosion
- c. Radiation
- d. Burns from contact with hot surfaces

Mechanical Failure

Struck be Moving Projectile

- a. Firearms and other such devises
- b. War

Natural or Environmental Factors

- a. Heat
- b. Cold

- c. Lack of water
- d. Animal attacks
- e. Wind
- f. Lighting

Homicide

- a. Suicide
- b. Legal intervention

Other Accidents

Why Go to Court?

Many problems arise in everyday life, which cannot be settled anywhere, but inside a courtroom. First someone must file a suit towards another company, person, or law/regulation; usually from the result of an accident. The two parties will then name claims or complaints to each other, and eventually arriving at a settlement or appear before a judge.

Avoiding Litigation

The easiest way to avoid litigation is the prevent accidents from occurring in your product or service. During the design process and production of a product, you can think of particular accidents, which you would like to avoid. This will help stop potential accidents form occurring even before the product is finished being manufactured. There are six lines of defense with regard to potential accidents with machinery.

Avoid the Accident:

This concept is very simple; if there is no accident there can be no claims. Therefore the engineer can eliminate hazard and increase safety while the operator follows instruction in order to avoid possible accident situations.

Protect from the Accident:

By using shields and guards you can prevent an accident from happening rather than eliminating the chance through design.

Make the Accident Safe:

Though design, create a working environment where even if the accident was to occur there would be no injury. For instance the air bag in a car is there not to prevent the accident from occurring rather it protects the driver in the event of a car crash.

Warn of an Impending Accident:

This is a built in system where the machine realizes that the piece of equipment is approaching a danger level and notifies the operator with either a voice, flashing sign or any other attention getting method.

Warn of the Possibility of an Accident:

This is different from the last precautionary measure because it simply states that during the operating of this machine there is a possibility of an accident to occur. This can be done easily with a simple warning sign.

Protect the Operator from the Accidents if it Should Happen:

This is almost exactly what make the accident safe deals with.

The Litigation Process

A person who feels there is another person, product or company responsible for damages of either themselves or their property calls upon the court. The court must either find an other party responsible or not. Therefore we need specific steps to create a process that pleases everyone.

Steps:

The Claim:

The filing of claims in a complaint and the plaintiff's request for a trial is the first course of action that takes place. The filing includes the reasons why the defendant is responsible for the claim. The claim my start out at first as a very vague statement but will eventually form into a clear and specific claim which both sides can understand. In order to avoid confusion, which leads to dismissal, the claims are expressed in general terms of what the accident was, and why the defendant is liable.

The Response and Defenses:

The claim is then given to the defendant who studies it answers with either a "yes" or "no." Answering yes means that they agree with the claim and a settlement can be reached. However the answer is more commonly a no, which is a denial of the dispute. The defendant will follow the denial with a list of reasons why he feels the allegations are wrong. Depending on the reasons given, an engineer may be needed.

The Discovery Process:

Each party is now allowed under litigation rules, to discover what the other side contends and what the basis s for those contentions. The plaintiff will learn about the design and manufacturing and reasoning behind them. While the defend will determine the events which took place during the accident, the surrounding circumstances and the other people involved. Discovery includes, interrogations, inspections, investigation, request for production of documents and other material, and depositions.

The Trial:

Each party is now allowed to present his evidence, witnesses, and arguments to the judge and the jury if he chooses to do so. A typical trial will consist of the choosing a jury, opening statements by each party, presentation of evidence and witnesses for the plaintiff then for the defendant, final arguments of each party, and then the verdict.

Engineers and Engineering Information

Engineers are used in litigation because they have advanced knowledge of how a design was made, test programs, meaning of specific data, standards and common practices and what competitors are doing. Because the engineer is usually the only one who understands the material he presents he has authority to testify in such an action – to assist the court in understanding the facts and information in the case. He can do this as either a fact witness or as an expert witness. As a fact witness he says what the facts are whereas an expert witness he is allowed to give his own opinion that will allow the jury

and judge to better understand the technical information and other non-common information.

How the Engineer Can Help the Attorney

Since an engineer knows more about the technical aspects of a product and a lawyer knows more about the legal aspects, there must be a special relationship formed between the two that allows them to work together. An engineer is needed to explain technical concepts to an attorney that he may have a difficult time understanding what is going on in a given situation. Such as the uses and applications of a certain product, tests and analyses performed on a certain product. They can explain product system parts, machine operations, and the design and development processes involved. An engineer can help answer questions such as, why a product is successful, and how the product was developed, tested, and evaluated. An engineer can help the attorney by providing engineering literature pertinent to a case, listing all possibilities of use of a product, and assisting with the actual examinations, interviews, and depositions. An engineer may help with translation of technical information into simpler terms for the jury and possible explanations of a complex technical process, as well as, evaluations of the risks involved with certain designs. Also the engineer must testify, listen, and react to testimony as both a technical person and layman to assist the jury in making an educated verdict should a case make it to trial. The engineer is also fully equipped to conduct accident reconstruction along with supply practical scenarios and likely conditions and results.

The Discovery Process

The Discovery Process is probably the most important part of the trial because this is when the attorneys will get associated with all necessary information about the trial and will allow them to figure out what they need to research for trial. The law not only allows you to discover all relevant information, but it also provides specific rules and procedures for the discovery process. The most common way of finding out information is with the use of interrogatories. The interrogatories follow a specific procedure of formal questioning. The questions are very specific and directed towards one person or company. Although the questions are specific you are advised to stay away from words like always, never, all, none, impossible, absolute, and certainly, for they are words which usually carry a hidden danger. Another process used is a deposition, which will be explained further, in the next paragraph.

The Deposition

A deposition allows the attorney of the opposing side to question a witness outside of the courtroom. The process is very important even though the questioning is less formal. A deposition will tend to be closer to the trial than other discovery procedure that in turn makes it a lot more specific towards the trial. A deposition is like a practice trial while still remaining very serious. Things said in a deposition can be used in the trial to gain advantage and possible help win the case. There are also some general rules about getting depose, which are: listen to the question, pause before you answer the question, answer only the question asked, answer truthfully and completely to the best of your ability, don't volunteer, and don't argue or advocate. These rules are pretty selfexplanatory. There are also specific reasons for using a deposition and they are;

- a. For purpose of discovery.
- b. To establish facts and to determine the origins of and bases for those facts.
- c. To determine the opinions and expert witness may offer at trial, and to explore the bases for those opinions.
- d. To seek information and bases to impeach the witness, it such opportunity exists.
- e. To pin down testimony, so it may not be changed at trial.
- f. To preserve testimony for trial.
- g. To learn the plans and strategy of the opponent.

The Trial

The trial portion of the litigation is really the final say on the claim. Both parties cannot agree on a suitable outcome so all the claims, arguments, and other beliefs are presented before a judge and usually a jury. Both parties are therefore agreeing by default that what ever the outcome of the trial is they will be in agreement. With this being the case a trial must have specific steps to follow in order to have complete agreement.

The Trial Process:

- 1. Picking a jury:
- 2. Opening statements:
- 3. Plaintiff presents his case

- 4. Defense presents his case
- 5. Final arguments
- 6. The charge to the jury
- 7. Jury deliberation
- 8. The verdict

There are two key times in a trial that are not mentioned in the previous list and they are: direct examination and cross-examination. Direct examination is a series of questions asked to you by your attorney, and cross-examination is the series of questions asked by the opposing attorney.

Questions

As an attorney, the types of questions asked take an integral role in the persuasion of the jury. An attorney is free to ask specific or general questions, open and closed questions, leading and non-leading questions, formal and casual questions, simple and complex questions, and probing and outlining questions. It is not only what questions are asked, but also how they are asked. Inflection and voice pitch changes can allow any lawyer to lend certain meaning to questions. The careful wording of questions or answers can carry far greater meaning than the mere words used. As for engineers, it is most important of all to answer questions truthfully.

Accident Reconstruction

Since we are dealing with litigation where there is a disagreement it will be necessary to have an accident reconstruction. This will help clear up the actual event in

question. For the most part the evidence, testimony and personal recollection do not fit together. One eyewitness may have a different story them another, big pieces of information may be missing, and may other things may arise which would make the event not fit together. Therefore and accident Reconstructionist is called in.

Definitions and Techniques Employed By Attorneys

Adverse Witness: someone who is called in to testify by the opposing attorney.

Answer: used interchangeably with response.

Appearance: this means that someone has appeared somewhere in the litigation process.

Arbitration/Mediation: two alternate dispute resolution methods

Balance of the Evidence: the information before the jury when they deliberate on the case.

Bar: location of legal activity, grouping of attorneys in a certain area of jurisdiction, to keep out

Bench: the location, person and authority of the judge in the courtroom

Breach: failure to perform or a break in a chain of action

Burden of Proof: respective responsibilities of the parties in a lawsuit

Care: the responsibility or charge to perform or conduct according to accepted levels of performance

Charge: when the judge instructs the jury as to how it must proceed in deliberation

Complaint: the list of claims and requests for the court intervention

Due Process: the proper legal steps in a procedure

Evidence: information that tends to prove or disprove matters of disputed fact

Exhibit: evidence offered and admitted at trail

- **Expert Witness:** a person who has the ability to assist the court and the jury in understanding the technical aspects of a matter
- Forensic: an engineer who applies engineering principles to the resolution of legal actions
- Foreseeability: the ability of a matter, situation, condition, or action to be expected sometime in the future

Hearsay: anything a witness says that he has experienced with his own five senses

Hostile Witness: a witness by hi actions or demeanor, demonstrates a hostile attitude toward the questioner

Impeach: to show the testimony of the witness to be untrue or unbelievable

Inadmissible: information or evidence that is outside the rules of litigation

Judicial Discretion: power to make judgment on gray areas that arise during the trial

Lay Witness: a witness for the facts

Liability: legal responsibility to pay or provide such remedies as the court decides

Litigation: total process of filing a lawsuit, pursuing the discovery and trial

- Mistrial: if the judge determines that a fair and proper resolution can on longer be reached
- **Negligence:** the failure to use the ordinary amount of care that would be expected from a reasonably prudent person under the same or similar circumstances

Oath: to swear to the truth of the statement you make or the information you give

Punitive Damages: exemplary damages-over and above the damages intended to make the plaintiff whole

Red Herring: a diversion or interruption

Side Bar: conferences when the judge wishes to hear the reasons for and against the objection from both parties

Summons: the formal legal document notifying the defendant that an action has been filed against him

Tort: a legal wrong committed or perceived to be committed against a person or other legal entity

War Stories

These are stories told to attorneys by attorneys to tell of previous encounters in the courtroom. Although these stories are sometimes exaggerated they are all true and serve a purpose. Each story has at least one bit of information that can be valuable to the listener. While being humorous they also aid the engineer in better understanding both the predictable and unpredictable natures of this business of litigation. These are some tips that an engineer can use in become more proficient. Never ask too many similar questions and don't fight or argue with the witnesses. Cross-examination should be kept short and know the answers before any questions are asked. Always attempt to tell a story and paint a vivid picture for the court that is easy for the jury to understand. Remember to stop when the point has been made, don't assume anything, listen carefully, and plan ahead. Don't try to fool the judge and jury.

Product Liability - An Interactive Qualifying Project

Tips for the Engineer Involved in Litigation

- 1. Don't try to run the game.
- 2. Always be truthful
- 3. Don't be frightened by the legal system
- 4. Listen to the attorney, he is in charge
- 5. Follow instructions precisely and accurately
- 6. View legal process for what it is
- 7. Do your best work and use your best judgment
- 8. Offer your attorney the best advise that you can
- 9. Present yourself well
- 10. Beware of traps
- 11. Correct your errors
- 12. Listen to advise

And above all Tell the Truth!!

Chapter 2 – The Art of Advocacy Videos

Purpose:

The purpose of this chapter is to report on the 9 videos we watched about the trial system. Each video focuses on a main step in the litigation process; opening statements, direct/cross examination, depositions, conclusion, etc. The examples used in the videos are real cases, which have been tried in the past.

Video 1 – Opening Statements

The first video in the series goes in depth about the opening statement, and it's importance to not only the prosecuting and defending attorneys, but holds bearing on the entire case. In olden times the opening statement in a trial was far less important, as well as elaborate. Also, they were trite, apologetic, and unimaginative. As you will see, the opening statements of today are much different. They are that way, because of a case study that was done in Chicago. The results of said experiment showed that jurors believed more from the opening statement, rather than the evidence.

There is a distinct style to a successful opening statement. In order to be successful, the attorney must establish a connection with the victim and the jury. For the jury to properly connect, the use of imagery is very useful as to build a picture in the minds of the jurors. However, one doesn't want to become too melodramatic or overly sympathetic when doing this, but rather ask the questions that the jurors are wondering. For instance, "Why is the defendant at fault for this accident?" Taking one's time and using repetition is also very important to keep ideas fresh in the heads of the jurors and make sure that all the facts are understood.

In the opening statement process, there are certain things that need to be addressed in order for it to be solid. A good opening statement should provide evidence to the jury. And in providing this evidence, he or she should explain it thoroughly and show it's importance to the case to the jury. Another tactic is to deal with the defense's case. This show's the jury that the attorney knows and understands the other side's case. However, one must be careful not to prove the defense's case and only use points that can be shot down. Another good tool to use are visual aids. As mentioned before, making a picture in the minds of the jurors is crucial to the trial. By the usage of visual aids, this makes the picture even more vivid than their imagination.

Video 2 – Direct Examination

The direct examination is claimed to be the hardest part of the trial process. In direct examination, there are certain questions that have to be answered before the questioning even begins, like what does the attorney want from the witness and how do they get it.

Traditionally, while examining a witness, the attorney will first establish credentials. In order to do this, the attorney might ask questions about the witness' background, their profession, or anything relevant to the case. After he or she has established the credentials necessary, the next step is the case.

There are many little but important things to remember about examining a witness. For example one must use attain a voice level high enough so that the jurors can properly hear the questions being asked, and theories that are proven. Also, it is very important not to stand in front of any visual aids that may be being used. Visual aids are

there to help the jury make decisions, but without being able to see it, they are useless. Also, explaining finances to the jury can get very complicated and confusing. The attorney must be sure to outline each of the formulas he or she gives as to not confuse the jury even more. Also by summing up quickly and giving final dollar amounts, this not only keeps things simple for the jury, but also keeps things short, so the jury doesn't lose interest.

While examining the witness, the attorney also has many cautions. He or she must make sure that they are not being to interrogative, and seem to be prying their own witness for information. By not being too interrogative, as well as keeping a good pace, and showing the evidence and exhibits to the jury in an orderly manner, you allow the witness to carry the case and have it run more smoothly for the jury.

In addition to a smoothly running story, there are many other subtle ways that an attorney can make emphasis with. Body language, such as physical stance or arm movements, volume of speech, and any pauses can help the jury hold emphasis in the things that you want them to. Most importantly, an attorney makes sure that he or she is not misunderstood in any way.

While questioning the witness, it is imperative that the attorney asks how the injury received has affected their life. There are lines however that shouldn't be crossed. While examining the victim, keeping him or her calm, and not allowing things to get overemotional is important. And lastly, be sure to show the injury to the jury. Studies show that people remember best, what is told to them first, and people remember most of what is told to them last. Showing the injury last gives the jury a lasting memory of the pain that must have been suffered by the victim.

Video 3 – More Opening Statements

This video extends the procedures of the opening statements that were shown in video one. In this video they show the importance of subtleties in the courtroom. It also is a good way to build a trust with the jurors. There are several ways to unknowingly move a jury to the side of the prosecution.

Small things such as body movements and voice tone and volume are key elements to an opening statement. By using the correct body movements an attorney can win the trust of the jury and thus win their favor. These can all show the importance and significance of certain events being narrated to the jury.

Another tactic in the opening statement process is to build the character and credentials of the victim. An equally effective tactic is to discredit the character of the defense. By doing so, the jury will perhaps lose respect for the defense and let their emotions take over their judgment. Above all, the attorney must never speak of money. If money is made mention of, it may seem as though the victim is after only that, and not justice. Also, keeping the jury's attention is very important. Not allowing certain information to drag on, or not showing too many visual aids is very important. Even the use of humor can be very effective. A good attorney can tell how his or her opening statement is affecting the jury, and they will use their opening statement to their advantage.

Video 4 – Cross-Examination

In order to cross-examine a witness successfully, there are several steps to be followed. First the attorney should establish a presence over the jurors, as he or she does in the opening statement and direct examination. When the witness comes to the stand, the attorney should introduce him or her to the jury. After that, the attorney must try to mix and confuse the words of this witness to either make it so it is a contradiction, or it is proving a case for the prosecution, and thus ruining the witness' credibility. Throughout this rigorous testimony, the attorney should be pointing out flaws and mistruths in the statements being made by the witness. By doing this, the attorney is showing the jury that he or she has full control over the witness.

While questioning the witness, the attorney must be cunning to lead the witness with questions to which the answers will be a help to the prosecution. The use of personification can help when explaining to the jury the object that is at fault in this case. Also, he or she must be careful to only use open-ended questions when there is very little risk. However, when getting to know the witness, using open-ended questions is a fine strategy. The attorney should try to destroy the credibility of the witness with accusations of foul play, and making mention to the amount of money being paid to the witness for their services. Another way to do it is to find contradictions in the testimony. When this happens, have the witness read the contradicting evidence to the jury, in order to exploit it. Then point out any information that the witness is not aware of. Each of these examinations should be building up to a conclusion, which hopefully can be more successful because of the cross-examining.

Video 5 - Cross Examination of Non-Medical Experts

The cross-examining process is a crucial to the prosecution. A good attorney will amplify, modify and or destroy the testimony of the witness. The ability to gain a psychological advantage over the witness is key. Using his or her own words against them can destroy the credibility of not only the witness, but also the defense's entire case. By the use of deposition, this can be attained. By asking questions such as, "Did I read that correctly?" or "Did you say that?" the witness will be forced to answer a question in a way that seems to contradict his statement. This can destroy his or her credibility in the minds of the jurors. Another effective way to properly cross-examine is to stain his professional conduct. Some expert witnesses may be misinformed, when this occurs, asking questions that would lead the jury to believe that he is incompetent will help destroy the testimony.

However, there can be many times where the witness will evade questions. In these cases, the attorney must present the witness with simple questions to which he can answer simply yes or no. Also, if there are any contradictions that arise, pointing them out immediately or even creating them can help to destroy the testimony. Another way an attorney uses the witness to his advantage, is by drawing points that actually support the attorney's theories.

A good attorney knows when he should and should not ask certain questions. In the event that the answer given is going to be unexpected, than the use of low risk, leading questions is better rather than asking open ended questions that may disprove any theories. Asking small and seemingly unimportant questions can be a useful tactic to

prove a point. On the other hand, when an attorney has the witness where he wants him, he can ask questions that will allow the witness to prove his point in one aspect of the case, only to disprove it later on.

Video 6 - Deposition

The deposition takes place in the conference room of the court. Lawyers on both the prosecution and the defense are in attendance. The conversation is recorded by a court reporter and all of the aforementioned are under oath during this time, meaning that anything that is said may be used against that person. It is important to not give away information that has not been asked for. A victim may be asked to discuss in detail the answers to complicated questions. And hopefully for the prosecution, he or she is crafty enough to evade questions like those, and come up with short direct answers to the questions asked.

There are many different strategies to the deposition that should be noted. First, the victim should always listen hard to the question at hand. By making sure he or she knows exactly what is being asked, there is no extra information given that doesn't have to be. Another useful trick is to pause before answering the question at hand. This gives the attorneys time to object to the question, and perhaps get the question thrown out. One should never be embarrassed to ask for a clearer question. There are many attorneys that are not above asking tricky questions to fool you into saying the wrong thing. And if there is still confusion, consulting the attorney is always helpful. Finally, the victim should always stay honest. There is no need to change the story simply to look better. And when in doubt, simply ask the interrogator.

Video 7 - Conclusion

The conclusion should be approximately 5 to 6 statements at the end of the closing arguments. As it is throughout the trial, body language and imagery is still very important during the conclusion. Both of these are crucial to getting one's point across, and this will be the final chance that the attorney has to do that.

Another good tool to use is alienation. Alienation is when the attorney takes a familiar situation, and then re-gives it to the jury in a new context. This is often useful when trying to describe the pain and disfigurement endured by the victim. It is very hard to address the jury with pain and suffering, because it is unknown what they have actually gone through. In order to be sure that the story given is an effective one, the attorney must first figure out how the story will be delivered. Then the attorney must tell the jury how important a decision they are making and show them exactly how important they are.

There are very few procedures that are successful in the closing argument process. Therefore it becomes almost necessary for an attorney to adopt closing argument procedures of another attorney. However, when choosing a closing argument to model after, one must be sure to mix their own methods and styles into it. Although basic principles can be copied and incorporated, one must be sure that they are applying it correctly.

Video 8 - Summation

In the summation, there is no longer a need for an introduction for the jury by this time is already well aware of all of the facts of the case. There is a need however, to be articulate, and well spoken during this time, because of how essential it is to the trial. Standing at the podium can also be used to the advantage of the attorney. Although it blocks the body of the attorney, it can also be used to show that he or she is an authoritative figure. The use of the podium depends solely on the style being used by the attorney.

During the summation process, attorneys will usually give insight on the evidence and testimonies that were given in the trial to refresh the memories of the jurors. Also, mentioning product's liability and its important concepts is a recommended method. The use of visual aids, is also an option, however, it is not uncommon for them not to be used. Also, the attorney should bring up the "Grizzly Audit" when allowed to, which talks about payment and compensation for any injuries. Once again, the attorney must establish credibility. This time he or she should do this by taking all of the facts and evidence given, and then reason them into a theory that would prove the case. Visualization is again a very important tool as well. However, a new useful tool is the usage of rhetorical questions. By bringing past tense questions into present tense, the attorney makes it seem more personal to the jurors.

While in the summation, as in every speech of persuasion, there is a time where the attorney has to ask the jury to "do the right thing." This is a very difficult task, and should be handled first. Explaining to the jury how important they are is also crucial. The jurors want to feel as though they are doing something important, and they are.

Video 9 – 60 Minutes™, A Classic Cover-Up?

This video is based on the problems with the 1964-1970 Ford Mustang. The problem was with the gas tank being on the floor of the trunk, and in rear end collisions, the car would burn up.

On July 15th, a driver burns after rear end collision. Ford however, claims that the driver was killed on impact, and also that combustion after rear end collisions, is quite common among cars. Ford is then sued over 60 times, but they are all settled out of court. Ford claims that all of the victims died in high-speed crashes, and that the location of the gas tank is insignificant.

The facts are that safety wasn't really an issue in the sixties. However, the death rate of people being burnt in Mustangs is three times that of any other car. The engineers that worked on the Mustang, after leaving Ford Motor Company, confessed that they believed that the drop in fuel tank was a very unsafe method. And also that, these safety hazards were noticed early, and could have been fixed, but weren't until 1971. Ford executives are on tape stating that safety was killing the auto industry.

Although there is evidence against Ford that would seem incriminating, Ford claims that they did not violate any laws or safety standards. Lee Iococa, president of Ford, helped design the Mustang in question. He also stated that he didn't want to change the design for economic and pride reasons. He is also quoted saying that if safety is important; don't buy a car built in the sixties.

Chapter 3: Robert Ortiz vs. B.M. Root, Diehl Machines and Boshco Inc.

Preface:

This first case involves a man who was injured while operating a multiple boring machine.

Introduction:

The multiple boring machine made in the 1940's by B.M. Root Company and was sold by Diehl Machines. Later Boshco, who sells used machines, bought, then resold the boring machine to Kimball Company. When the machine was made there was no guard attached to it because at the time there was no standards, which required a guard. However once there was a standard created for guarding by OSHA (Occupational Safety and Health Administration), B.M. Root designed and produced a guard.

Boring bits should be provided with a guard that will fully enclose all portions of the bit and chuck above the material being worked. (OSHA 29CFR 1910.213) Therefore the guard was added to the boring machine in 1986 with all the necessary warning sings needed. The boring machine has multiple bits which spin together while the table below raises and lowers. In order to use the machine, just put the piece of wood

on the table and let the table raise up to the spinning bits.

Accident Description:

On September 7, 1993, Mr. Ortiz, a former employee of Kimball Company injured his hand while using this type of multiple boring machine. His hand was caught in the spindle of one the rotating bits while trying to clean off his cutting surface. He lost his

middle finger on his right hand. He is suing these parties on the grounds that they were negligent in the design of the machine and that they failed to warn operators of the danger.

Depositions:

Robert Ortiz:

On the day of the accident Mr. Ortiz was using a multiple boring machine while working for his employer, Kimball Company. The piece of wood that was currently being machined was starting to collect a lot of sawdust. So in the standard practice at Kimball Company, Mr. Ortiz lowered the table with the wood still on top and the spindles still rotating. Then he went to use an air hose to blow away the sawdust and wood chips. However the nozzle for the air hose was malfunctioning because the lever used to open up the airflow had broken off. So at first he tried to use his thumb to press the button enough to get the air hose to blow but his thumb slipped off the button. So he tried using both thumbs, one on top the other. Unfortunately that also didn't work, so he went and put on a pair of gloves in the hope of gaining a better grip on the nozzle. Even with the gloves on he wasn't generating enough air pressure to blow off all the sawdust and wood chips, so he moved his hand forward towards the table. At this point the his hands got too close to the still rotating bits and when his right hand slipped of the nozzle it went forward, hitting the spindles. The spindle grabbed a hold of the right middle finger part of the glove and torn his middle finger almost completely off. Bob DiAlessi, an employee of the Kimball Company, was the first to respond. He came over and shut off the machine and took the glove off the spindle. Gerry Desjaro, the Vice President of

Operations at Kimball Company, was the second person there and with the help of Bob, they took Mr. Ortiz to the hospital.

After the accident he continued to work with the same company but he soon quit because of pain in his hand. He was also not sleeping well which in turn affected his performance as an employee. He hand now also lacks dexterity, strength and circulation because of the accident, which took his middle finger.

Gerard Desjardins:

Gerard has been working in manufacturing since 1973, and has been employed by Kimball Company since 1987. He has been promoted from Plant Manager to Vice President of Operations while working for Kimball. His primary concern is the issue with safety because he is in charge of the operations in the facility.

Gerard seems to agree with the removal of the guard on this boring machine because there were so many concerns with the actual guard in place that it had become dangerous. The guard prevented the drilling of certain materials, because of their dimensions, the table and the guard made a pinch point when the table was being raised for drilling purposes, and since the guard was a wire mess the visibility of the operator was reduced to 50%. These are a few of the concerns, which can up due to the guard. Even though there are safety hazards if you remove the guard he feels that it was safer and better off without the guard in place. This statement is backed up by the ANSI

Wearing gloves in the facility was common practice and were readily available if requested. However wearing gloves while operating boring or any other kind of drilling machine is against the proper safety procedures. There are also warnings signs directly

on the exact boring machine, used by Mr. Ortiz, which specifically state "Do not wear gloves or lose clothing while operating this machine".

Igor Paul:

Igor is an expert witness from Massachusetts Institute of Technology. His main focus on this case was the fact that was no guard on the machine at the time of the accident. He claims that all other problems such as the air hose, and warning signs are just "red herrings" which get in the way of the true cause of the accident which was the fact that there was no guard on the machine.

Conclusion:

The only organization that is at fault is Kimball Company because they removed the guard. However since Kimball was Mr. Ortiz's employer at the time of the accident nothing can be done because you cannot sue the company for which you are employed. The other companies are in no way liable for the injuries that Mr. Ortiz suffered. B.M. Root made a product that was perfectly fine according to the standards. When the standards changed B.M. Root took the necessary steps to satisfy these new changes. Boshco Inc. sold the boring machine to Kimball Company with a guard on it. Once the product is in the customers' possession whatever modifications they make are up to themselves and not the company who sold it to them. Mr. Ortiz also blatantly disregarded the warning sign, which specifically prohibits the use of gloves. Since Mr. Ortiz failed to obey this warning he is not entitled to any money.

As for Igor Paul's deposition, we feel that his claims have no bearing on this case for several reasons. First off he did not even go to the company and personally inspect the boring machine. Instead he reviewed photographs and descriptions of the machine. Right away that makes his opinion have lass merit on the grounds that he did not personally inspect the machine in question. Secondly when he reviewed this case it was 9 years later. In those 9 years there have been many technological advancements as well as new standards and regulations regarding all facets of machinery, including guarding and drilling machines. His opinion comes partly from the knowledge of these new advancements, which were not yet available when the accident occurred. He suggested that there should have been a better guard installed which was connected to a termination switch to shut off the machine if the guard was not in place. Unfortunately there was no standard at the time, which required such a guard to be in place.

Although Igor Paul's opinions are respected and merited, they were not required at the time of the accident and therefore no fault could be held against the defendants.

Chapter 4: Mrs. Robin Laflamme vs. Daimler Chrysler

Preface:

This case was very different than the previous case. In this case almost all of the evidence points in one direction. However, unlike the Ortiz case where the majority of the evidence pointed towards the fault of the plaintiff, in this case the majority of the evidence points toward the fault of the defendant.

Introduction

Accident Description:

On October 25, 1995, Teresa Beetter and Robin LaFlamme were involved in an accident in Portland Maine. Teresa Beeter was stopped at a stop sign in a Geo Metro when a '94 Plymouth Voyager, driven by Robin LaFlamme, struck her. The Voyager struck the Geo in the rear cause damage physically to both cars and both drivers. Mrs. LaFlamme claimed that the car seat, which she was in, slid backwards as she was trying to apply the brakes. With the seat slid back the brake pedal was unreachable and the two cars collided because of it. Mrs. LaFlamme feels that it was not her fault and that Daimler Chrysler was in fact to blame for this accident.

The case of LaFlamme vs. Daimler Chrysler:

The area in question refers to the drivers side seat and track system. The mechanism, which adjusts the seat, malfunctioned during application of the brake pedal and as a result caused a collision in which Mrs. LaFlamme cars rear-ended another

vehicle. This collision caused damage to both cars and Mrs. LaFlamme physical as well as emotional state and she is seeking compensation.

Depositions/Testimony

Kevin LaFlamme:

Kevin says that his wife would constantly complain about the driver's side seat sliding back while she was either accelerating or braking. In a couple of instances Kevin had witnessed first hand the problem that his wife had been claiming. He went to Prime Auto and told an employee named Dirk about the seat and how it slides backward. Dirk personally tried out the seat and agreed that the seat did in fact move backward when the brakes were applied.

Robin LaFlamme:

Mrs. LaFlamme starts out by explaining the instead of working her normal 40-50 hours a week she works off and on depending on how well she feels that particular day. In regards to the seat moving, she claims that the seat has slid backward at least 10 times whether it is while stepping on the gas or the brake pedal. After picking up the car from being fixed she drove the car without adjusting the seat. On the way home she got in the accident with the geo metro. She then drove herself home after meeting with an officer and checked herself into the hospital at 6:50 that day. Since the accident she has been refused jobs and lost one. She has also seen a doctor about a concern with her hip, which had not been a problem before the accident. She was told that Chrysler would make her an offer but there was no money ever given to her.
Gerald Byron:

Mr. Byron is a self employed consultant who works with Byron Associates, which is a sub contracted company of Engineering Analysis Associates. Gerald was hired by Prime Automotive and not by Chrysler Corporation. In his experience, Gerald has encountered sliding seats in Ford and General Motors vehicles, but never in a Chrysler.

Chuck Briggs who is the manager of Prime Automotive told Gerald about the complaint of the sliding seat. He also told Gerald that they were not able to duplicate the problem express in the complaint. At the dealer ship Gerald and Chuck took turns accelerating the vehicle. They found that they were able to duplicate the problem and experienced first hand that the seat did in fact slide back during an acceleration. After they were finished looking at the vehicle, Gerald said the there is in fact a problem with the car seat and it is in the seat adjusting mechanism. From the dealership they looked up if there was ever a problem documented in the past regarding this particular problem with this Chrysler minivan. What they found was a TSB (23-23-94) (Technical Service Bulletin), which clearly stated that the car sear did not latch completely and consistently. In the Bulletin the solution, which was suggested, was to file the floor pan mounting holes. That TSB was issued on March 18, 1994. There was a similar TSB, which they found that was issued in 1993 (TSB 23-32-93).

Mark Crossman:

He is a Product Development Specialist Working as a Safety Development Engineer for the Chrysler mini-van. In 1993 Mark become aware of the sliding seat problem while doing a frontal flat barrier crash test. He was aware of the test that

showed that the mini- van seats did in fact move during frontal impact. After viewing the video of the crash, the seat was definitely in a different position than previous. In Chrysler's crash test VC4822 the report states that the test dummies knee hit the dashboard due to the seat sliding to the most forward position. However could not be certain of what the cause was. He says that neither him nor his company would ever design a vehicle in which the seats would be able to shift and become unsafe.

Joseph Ozdowy:

Joe is the Director of Manufacturing at Daimler Chrysler in Coradoba, Argentina Assembly Plants. He also worked for Windsor Ontario Plant as the Resident Engineering Manager. As Director of Manufacturing he was involved in creating proper processes and auditing the plans to make sure that they were being adhered to. As Product Engineer at Windsor he was the liaison between design engineer and plant problems, and helped solve the problems with the design engineers. Windsor's specialty in the Chrysler minivan, which is in question for this trial. Joe recalls a report issued on July 9, 1993 in which stated that the Drivers side seat does not engage when it is adjusted and ratchets back. His feeling is that the seat itself doesn't move rather it's the fact that only one side locks into place. When the problem was first made aware, in the spring of '93, Joe performed numerous tests in order to duplicate the problem. He tested several scenarios for instance: while the car was at a stand still, while in motion, while braking, and acceleration. These test where done on all the minivans. What he found was that the problem lay in the floor pan mounting holes. The solution which he came up with was to elongate the holes with a file.

Chryslers Experts:

Jon Mckidden:

Jon will testify in regards to his understanding and analysis of the happenings of the accident in question, the damage to the car, the injuries to Mrs. LaFlamme, the design and manufacture of the car (including drivers seat and seat track components). He will also say that the car was properly designed and made, and that it was not unreasonably dangerous in anyway that could have caused or contributed to the accident. In other words the components involved were properly and safely designed. These claims are made based all on the inspection of the vehicle, police reports, photographs, depositions, and answers to interrogatories. He is also there to rebut the plaintiff's experts.

Testing and Standards

Seat Belt Test:

The '94 Dodge used in the test was special purpose with a 2,5 liter transverse engine, automatic transmission, power steering and power brakes, weight: 1739 kg, and an impact speed of 56.5 kph. Reports of the test dummy's knee's hitting the dashboard and the driver's seat shifted to the most forward position on impact.

MASSE (Manufacturing Assurance Standard Safety/Emissions):

Check all installation and functions of the seat system installed with manual adjusters. In all dual latched seats both of the adjusters must fully latch in the same relative position after seat adjustments in vehicle.

The seat must comply with the Federal Motor Vehicle Safety number 7 (seating system): Once engaged the restraining devise for a forward facing seat must not release or fail when a forward longitudinal force, in Newtons, equal to 20 times the mass of the hinged or folding part of the seat, in kilograms, is multiplied by 9.8, is applied through the center of gravity of that portion of the seat (s4.3.2.1.a)

Another FMVS:

Once engaged the restraining device shall not release or fail when the devise is subjected to an acceleration of 20 G's. (s4.3.2.2)

Conclusion

The case the LaFlamme's have is very strong one. Chrysler's Performance Standard number 6 states "the latching mechanism must engage positively without hesitation and in a consistent manner without any external force other than the latch return spring." The minivan was in clear violation of this standard and Daimler Chrysler did nothing to adhere to this Standard, which they had created. Also the TSB (Technical Service Bulletin) put out March 18, 1994, which fully explained the problem with the car seat and even gave a solution for a mechanic to use in order to fix the problem, was never addressed. Daimler Chrysler sends out this bulletin by mail and electronic mail, to every Chrysler dealership. Therefore Prime Automotive must have received this bulletin prior to the accident involving Mrs. LaFlamme and there was nothing done about the complaint regarding the latching mechanism on the driver side seat. The only actions taken by Prime Automotive was to completely replace the car seat. This obviously didn't

solve the problem because Mrs. LaFlamme's accident occurred on the very day, which the new seat was installed Also by performance standards, seat adjusters must withstand a static load of twenty times the weight of the seat. This was obviously not the case during the time of the accident.

Through various depositions and testimony, it has been made apparent that there have been problems with the particular latching mechanism found in LaFlamme's, vehicle.

Although there has been compensation for the car, the matter of money lost through lost business has not been addressed. We feel that there must be money awarded to the LaFlamme's for these losses, due to the malfunctioning seat adjuster in the minivan, which we feel was the primary cause of the accident.

Chapter 5: Summary of Products Liability In A Nutshell

Preface:

In order to be able to review Product Liability cases and give clear and concise report, we must first get an understanding of the terminology and methods of a Products Liability case.

5.1 Definition and Scope:

5.1.1 Product:

A product is a tangible personal property or good; however, product liability law today has extended beyond personal-tangible goods. Several rules govern the process of deciding how product liability law is applied to a situation. The first rule states that product liability law is not restricted to cases involving products, and it can be applied to very specific situations. The situation is defined when the defendant is in the best position to spread the loss and prevent the injury. Tort/Product Liability can also apply to other public concerns such as freedom of speech and the difficulties of proof.

5.1.2 Defect:

A defect is defined as the reason for imposing liability, against a product supplier, due to the supply of a defective product.

Product Defects: There are three types of product defects, which are termed as actionable wrongs. The first is a manufacturing or production flaw. This is a random flaw, which is not typical of the product. The second is a design defect, which is an inadequacy in the design of the product. The last type is a defective warning or

instruction. Misrepresentation is not technically a defect, however it fits under this category nonetheless. An important consideration when examining the topic of defects is the difference between a production and a design defect. The reason for this consideration is that strict liability applies only to production defects. A second consideration is necessary when dealing with the topic of misrepresentation. Misrepresentation is not easily distinguishable, from other defects, for three reasons. The first is that the product may carry express representations. The second is that the products' appearance may imply safety. The last reason is that inadequate warning and misrepresentations are unable to be separated.

Conceptual Standards for determining defectiveness: The term "defect" is used to describe any actionably wrong with the product when it leaves the sellers' hand. A distinction exists between a dangerously defective product and an un-merchantable product, especially when the only loss is an economic one.

1.) Consumer Expectations: There is a strict definition for the term "unreasonable danger." "The article sold must be 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." In design cases, expert evidence is necessary if defectiveness is to be established. "The foundation of a consumer expectation case is usually shaped by expert testimony, regardless of whether the case is brought in strict liability or in negligence.

2.) Presumed Seller Knowledge: Strict liability, when based on innocent misrepresentation, does not require a risk-benefit analysis.

3.) Risk-Benefit Balancing: Risk-Benefit analysis is used by the courts in the determination of design defects. There is a seven-step standard used in risk-benefit analysis:

a.) The usefulness and desirability of a product.

b.) The likelihood and probable seriousness of injury from the product.

c.) The availability of a substitute product that would meet the same need and not be as unsafe.

d.) The manufactures ability to eliminate the danger without impairing the usefulness or making the product too expensive.

e.) The users' ability to avoid the danger.

f.) The users' anticipated awareness of the danger.

g.) The feasibility on the part of the manufacturer, of spreading the risk of loss by pricing or insurance.

4.) State of the Art: The burden of eliminating a danger may be greater than the risk that the danger itself creates. It is possible for a product to be deemed unavoidably unsafe.This situation requires the absence of the knowledge or ability to eliminate a danger.

5.) Unavoidably Unsafe Products: Strict liability does not apply in the case of an unavoidably unsafe product.

6.) Defect and Unreasonable Danger: The Burden of proof of negligence, in a case of an unreasonably dangerous product, lies with the plaintiff.

5.1.3 Sale:

A sale is the passing of title from the seller to the buyer for a price.

5.2 The Cause of Actions and Damages:

5.2.1 Negligence:

Negligence arises in various ways. These ways all have to do with the inadequacies in: inspection, processing, packaging, warning, design, marketing, or in any manner in which the defendant fails to uphold a reasonable standard of care. The Plaintiff is responsible for demonstrating that the accident is not possible in the absence of negligence. In addition, the plaintiff must show that it was the defendant's duty to eliminate the danger. Lastly, the plaintiff must, with evidence, remove responsibility for the accident from all parties except the defendant.

5.2.2 Statutory Violations:

This form of cause of action relies directly on the terms of the statute or the intent of a legislative or regulatory body.

5.2.3 Reckless Misconduct, Concealment, and Deceit:

Reckless misconduct justifies the recovery of damages for emotional distress. This form of distress is not otherwise unrecoverable.

5.2.4 Strict Liability:

Implied Obligations: a. The warranty of merchantability

1.) Unless excluded or modified, a warranty that the goods shall be merchantable is implied in a contract for their sale if the seller is a merchant with respect to goods of that kind.

2.) Merchantability is contingent upon the following:

a.) Must pass without objection in the trade under the contract description.

b.) In the case of fungible goods, must be of average quality within the description.

c.) Must be fit for the ordinary purposes for which such goods are used.

d.) Must run, within the variations permitted by the agreement, of even kind, quality and quantity within each unit and among all units involved.

e.) Must be adequately contained, packaged, and labeled as the agreement may require.

f.) Must conform to the promises or affirmations of fact made on the container or label if any exists.

3.) Implied warranties are permitted to arise during the course of dealing or usage of trade, unless otherwise permitted

a.) The warranty of fitness for a particular purpose: Strict liability applies in the case of particular purpose warranty. This is unusual and worth mention because strict liability does not normally apply in merchantability or strict tort.

b.) Strict Tort Products Liability

Tort Law states:

1.) One who sells a defective or unreasonably dangerous product to a consumer is liable for physical harm caused to the consumer or his property if:

a.) The seller is engaged in the business of selling such a product, and

b.) It is expected to and does reach the consumer without substantial change in the condition in which it was sold.

The above law applies regardless of whether the seller has exercised all possible care in preparation. This law also applies if there is no contractual agreement between the buyer and the seller.

c.) Abnormal danger

There is a list of standards, which determine whether a product is abnormally dangerous.

The existence of a high degree of risk

1.) The likelihood that the harm will be great

2.) The inability to eliminate the risk through the exercise of reasonable care.

3.) The extent to which the activity is not a common usage

4.) The inappropriateness of the activity to the place where it is carried on.

5.) The extent to which its value to the community is outweighed by its dangerous attributes.

d.) Misrepresentation: a. Express warranty

1.) Express warranty by the seller

a.) Any statement or promise by the seller, which relates the goods, establishes an express warranty, which must be conformed to by the seller.

b.) Any description, which is used, in the making of a bargain, must be accurate at the time of sale.

c.) Any model used in the creation of a bargain must be accurate at the time of sale.

2.) The seller creates an express warranty, even without using the word "warranty", if an affirmation of the value of the goods is given.

e.) Strict tort

Strict tort states that a seller is still liable for harm done by a product sold even if:

1.) It is not made negligently or fraudulently, and

2.) The consumer has not bought the product under any form of contract.

5.2.5 Damages:

General: The plaintiff is entitled to recover for any foreseeable damages, in tort or warranty.

Emotional Distress: There are differing opinions on whether recovery is an option for sufferers of emotional distress, assuming there is no accompanying physical damage. If physical damage exists, recovery can be made based on emotional distress.

Punitive Damages: Very few plaintiffs are awarded punitive damages in cases of personal injury.

Joint and Several Liabilities: Joint liability is imposed when the damages are practically indivisible.

5.3 The Parties:

5.3.1 Plaintiffs:

A person who sues any products defendant for the purpose of recovering personal injuries. This person could be a buyer, user, consumer, or any bystander who could be in harms' way.

5.3.2 Defendant Seller of New Products:

Manufacturers: In the case of a manufacturer, there are a variety of parties who may be sued. The final assembler may be sued as well as any manufacturer of any component part. These parties may be sued if the part is defective. However, even if the component meets the specifications, the manufacturer is still at fault if there is a foreseeable risk involved with installing the component into the final product. The manufacturer is responsible for its product before and after it is assembled. It is responsible for the components, which go into the product and the assembly of the product, even if they don't actually produce the components or assemble the product themselves. If a manufacture's name is on the product, they are responsible for any problems, which occur.

Middlemen and Retailers: The retailers are not liable for any latent defects in a product, unless the defect could have been found under routine inspection. "The Sealed Container Doctrine is a term of art used to relieve non-manufacturing sellers of implied strict liability for latent defects not discoverable by reasonable inspection, whether or not the product is sold in a sealed container. This document, however does not apply to cases of misrepresentation. This also doesn't apply if there is any attempt at a repair or a rebuild. In this case the retailer is considered the new manufacturer. A middleman may also be found guilty, on some level, if it receives a commission from the sale of a defective product. If the middleman doesn't receive any commission, then it most likely won't be held liable.

5.3.3 Defendant Used-Product Sellers:

A seller cannot be held responsible for a product after it has left the chain of distribution, assuming it is not a case of misrepresentation or a design defect. Also the seller cannot be found liable if it is "not equipped to pass on the quality of the goods and had no direct impact on the continuing relationship with the manufacturer." The only time that this does not hold true is in the case of a regular used product seller. They are still considered part of the chain of distribution, and thus are liable.

5.3.4 Defendant Successor Corporations of Product Sellers:

This section deals with the buying and selling of entire businesses, and how the responsibility for previously manufactured parts is distributed. There are two major rules in this area of product liability. First is the Turner Rule, which spells out how the buyer of business can be liable for the defective products of the previous owner. The Turner Rule states: "1.) Continuity of management, personnel, physical location, assets, and general business of the predecessor; 2.) Dissolution of the predecessor as soon as legally and practically possible; assumption by the successor of all liabilities of the predecessor necessary for the continuation of normal business operations; and 4.) A holding out of itself to the public by the successor of the effective continuation of the predecessor." The second product liability is the Ray Theory, which comes into play when the successor gains control of all or substantially all of the manufacturing assets of the predecessor. "It is based on policies based on virtual destruction of remedies against the predecessor through the acquisition, the ability of the successor to spread the risk, and the fairness

requiring it to do so as burden reasonably attached to the benefit of acquiring the good will of the predecessor."

5.3.5 Defendant Lessors, Bailors, and Licensors of Products:

Lessors are liable for any injury, which occurs to the customer when using the lessor's defective product. This is true provided the defect occurs during the rental period. A long time lease is considered the same as the purchase of a product. In general, the lessor is held responsible if he either "marketed or placed the product in the stream of commerce."

5.3.6 Defendant Employer-Suppliers of Products:

Employers are held liable for certain injuries, which occur to employees in the workplace. These instances include the cases where the employer knew about a potential problem area on a machine and did nothing about it.

5.3.7 Defendant Providers of Services:

Representational Conduct: In this category there are three types of people who can be held strictly liable. They are: product certifiers, trade associations, trademark licensors franchisers, and advertisers. This would be due to misrepresentation of a defective product.

Professional Services: The providers of professional services are not held responsible under strict liability, whereas the providers of non-professional services are. Also, product related services are covered by strict liability.

Pure Service Transactions: Strict product liability does not apply when a pure service is provided and where no product is involved.

5.3.8 Defendant Real Estate Suppliers:

Builder-Vendors: Builders of dwellings or buildings are strictly liable for injury cause by defective construction. This applies whether the building is large or small. Liability is based on the assumption that the contractor should have superior knowledge and skill regarding the construction of the building.

Lessors: Lessors are required to upkeep the building that they are leasing out. The person leasing the property has the right to expect the dwelling to be well maintained, up to the level at the time that the lease was signed.

Occupiers of Premises: The landlord is strictly liable for injuries caused by a latent defect, if present at the time of the lease. A landlord is considered part of the production and marketing enterprise. This rule holds true unless an occupier's actions can be considered abnormally dangerous. In that case, the occupier is liable.

5.3.9 Contribution and Indemnity:

One who is found intentionally liable is not entitled to contribution. The Indemnity Doctrine says that "one passively or secondarily at fault was permitted to recover in full against one who is actively or primarily at fault." Some courts say that there is recovery relative to the amount of fault laid upon a person. This is called comparative fault.

5.4 Factors Affecting Choice of Remedies, Jurisdiction, and Procedure:

5.4.1 Reliance:

"Proof of reliance is expressively as a condition to recovery for conscious, negligent, and innocent misrepresentation resulting in personal injury." However the express warranty provision says, "an affirmation merely of the value of the goods or a statement purporting to be merely the seller's opinion or commendation of the goods does not create a warranty." In order to recover for a breach of express warranty, one has to show that the consumer relied on the assurance of the advertisements when buying a product. If there happens to be an inadequate warning, and that is the basis for a case, there must be proof that the warning was relied on. Otherwise, misrepresentation cannot be claimed.

5.4.2 Disclaimers and limitations of Remedies:

In general: "A disclaimer arises when no remedy is given, while a limitation of remedies exists when the plaintiff is given some remedy which may be different from or less than that otherwise provided by law." Contractual restrictions cannot be used to avoid strict liability in the situations of negligence or warranty. The only time when contractual restrictions are valid against liability is when product liability is not applicable.

General Requirements:

(a.) Conspicuousness and Clarity: Lack of inconspicuousness and clarity will invalidate disclaimers. Writing a disclaimer in small print or hiding it on the back of a form is grounds for invalidation. The disclaimer must be written in "clear and

unequivocal terms and contain language which is close enough to express negligence that doubt is removed as to the parties intent."

(b.) Timeliness: A disclaimer must be delivered before a sale takes place or a contract is signed.

(c.) Fulfillment of Essential Purpose: "Where circumstances cause an exclusive or limited remedy to fail of its essential purpose, remedy may be had." In most cases this statement comes into play when a seller fails to fix a defect in a reasonable amount of time.

(d.) Conscionability: If a contract or a contract clause is found to be unconscionable, or leave a buyer with no options, it can be denied or accepted without the unconscionable clause.

As Affected by the Claims Asserted: Disclaimers of fraud, deceit or negligence are not valid. A complete disclaimer of liability is, in most cases, found invalid assuming personal injury is involved. This is a result of the idea that in a case of personal injury, at least a minimal remedy is written into any sales contract. In addition, disclaimers tend to be invalidated if their purpose or result is the relief of obligation imposed by a statute.

Scope and Effect of Disclaimers: Only a party who is directly or indirectly part of an agreement is bound by a disclaimer.

5.4.3 Recovery of Solely Economic Loss:

The Rule and its Rationale: A plaintiff cannot recover if he or she has suffered a solely economic loss, as a result of a defective product. This applies in the case of negligence or strict liability. The rationale behind this rule has multiple parts. The first is

that "product recovery, whether in tort or warranty, is limited to foreseeable damages." The second rationale is that negligence and personal injury are not disclaimable. The rule is valid regardless of privity between the plaintiff and the defendant. Solely economic loss is not insurable under product liability because a proof of an "occurrence" is necessary for indemnity to be received.

Definitions of Solely Economic Loss: "Economic loss is typically defined as loss in value, loss of use, cost of replacement, lost profits, and damage to a business' reputation, where no physical accident is involved."

5.4.4 Notice of Breach:

"Where a tender has been accepted...""the buyer must, within a reasonable amount of time after he discovers or should have discovered any breach, notify the seller of the breach or be barred from any remedy." This is a protection for the seller. It allows them to prepare for a possible claim against them.

5.4.5 Wrongful Death:

A breach of warranty or negligence may be considered a wrongful act, thus may be subject to a wrongful death action. This is due to the fact that culpability exists "in the consciousness and understanding of all right thinking persons."

5.4.6 Procedural Considerations:

Jurisdiction: a. Statutory Causes of Action: In the case were an express warranty is breached by a defendant, state consumer protection statutes gives the plaintiff the right

to treble damages and also to collect for attorney's fees. There is a private right of action, established by Congress, for damages where someone is injured due to a violation of a Consumer-Product-Safety-Rule. These are both examples of causes of action brought on by statutes.

(a.) Minimum Contacts of the Defendant: A defendant cannot be found liable for a defect, which occurs outside of his former state. If a retailer does not avail himself " of the privilege of conducting business in the former state" or "to serve directly or indirectly" in the market, then they cannot be held liable. However, if the manufacturer intends to make a profit from a national market, then the specific state does not exclude the manufacturer from liability.

(b.) Class-Actions and Multi-District Litigation: There are four types of class actions: "1. Where there is a risk of inconsistent or varying adjucation; 2. Where adjucation of some claims will, as a practical matter, be disposed of the claims of others not a party to the litigation; 3. Where the defendant has acted or refused to act on grounds generally applicable to a class, making final injunctive or declaratory reliefs appropriate; 4. Where questions of fact or law common to the members of the class predominate over the questions affecting only individual members." The first three types are mandatory for all members of the class to follow. The fourth type gives an option. The multi-district litigation statute states that similar pending litigation from one district can be used in pretrial matters in other districts.

(c.) Inconsistent Verdicts and Erroneous Instructions: Every court treats these issues differently. Some say that a defective product does not necessarily breach warranty and

vice-versa. Some however disagree and say, "If any counts in a declaration are good, a verdict for entire damages shall be applied to such good counts."

(d.) Res. Judicata: Collateral estoppel is a term which, "precludes relitigation of an issue that has been finally determined in a prior litigation between the same parties or their privies or relitigation of an issue by one party where that issue has been finally determined against that same party in a previous litigation." Non-mutual defense collateral-estoppel is used when a plaintiff tries to sue a defendant on an issue dealt with in a prior suit. Non-mutual offensive collateral estoppel is used when a defendant tries to relitigate a prior issue.

(e.) Choice of Law: If a federal law decides that its own rule is procedural, federal law is applied over the forum states' law. In the case of change of venue, the transferor court sets the conflict rules for the transferee court. A state must have a significant number of contacts involved in the case in order to apply its own law.

5.4.7 Statutory Compliance:

Compliance with applicable statutes means that the product is inherently not defective.

5.4.8 Defense Contract Specifications:

Non Government Specifications: If the specifications are conformed to, the manufacturer is not liable. Unless the products "are so defective and dangerous that a reasonably competent contractor 'would realize that there was a grave chance that his product would be dangerously unsafe'."

Government Specifications: A manufacturer is not liable for a defective product it is in accordance with government contract specifications. There are four elements to this statement: 1. "The approval of the design by the United States must involve a discretionary function"; 2. The United States must have "approved reasonably safe specifications"; 3. "The product must have conformed to those specifications" and; the supplier must have "warned the United States about the dangers in the use of the equipment that were known to the supplier but not to the United States."

5.4.9 Statutes of Limitation:

The Applicable Statute: Two or more statute could apply to a case. Either a warranty statute or a personal injury statute or both could be applied. A statute of repose is a limitation whose period runs between two fixed dates, regardless of the situation.

Date of Accrual: An accrual date is the date at which the statue of limitations takes effect. Three common types of these dates are: "1.) Date of the injury, 2.) Date when the plaintiff had reason to know about the claim, 3.) Date when the plaintiff, in the exercise of reasonable care, should have known of the claim."

Tolling Exceptions: A statutory period has the ability to be tolled, or stayed. A reason for this would be the happening of an event, which prevents the period "from beginning or continuing to run as it would otherwise do in the absence of the events occurrence."

5.4.10 Statutory Retrenchments:

Some issues covered by these retrenchments, or limitations are: "limitations on the amount of chargeable contingent fees; elimination of the collateral source rule; provision for the periodic payment of judgments; elimination of strict liability and the adoption of the product state of the art defense; elimination or restriction of recovery for punitive damages.

5.5 Production and Design Defects:

5.5.1 Production defects:

In a manufacturing defect case, the plaintiff proves that the product is defective by showing that it does not agree with the manufacturer's specifications. However if a manufacture determined that a 20% failure rate was acceptable, none of the products falling within this range of failure should be considered defective. Random defectiveness is probably what is taken into account by the concept of production defect. It is not always a useful means of distinguishing production from design defects, if the idea is intended to refer to the rate of failure.

5.5.2 Design Defects:

The Theory of Liability: There are many different views as to what constitutes as liability. The most widely exercised standard of liability is some form of risk-utility analysis. Risk-utility analysis is where the liability of the manufacturer depends upon a departure from certain standards of care. This is basically a matter of negligence on the part of the manufacturer, but many courts would have us believe that their focus is on the

product rather than the manufacturer's conduct. Although a jury will take into account the judgment or decision, in other words "conduct" of the manufacturer. However, in strict liability cases, industry custom or usage is irrelevant to the issue of the defect. Instead, the factors of the degree of danger posed by the challenged design, the probability that such a danger could occur, the mechanical feasibility of a safer alternate design, and the adverse consequences to the product and to the consumer that would result from an alternate design. One view as to what design defectiveness is in strict liability is whether the product did not perform under normal conditions as an ordinary consumer would expect, also if the plaintiff proves that the product's design outweighs the risk of danger inherent in such a design. However a product that fills a requires/critical need and can be designed in only one way should be viewed differently.

Polycentricity: Sometimes conscious design decisions are described as "polycentric" or "many centered problems", in which each point of a decision is related to all of the others. This describes how some flaws in design may result from concisely inputting one design, which is safe under most conditions, but flawed under lower percentage conditions. Thus trade-offs in the design of a product involve safety, utility, and cost. It is the manufacturers judgment as to whether the trade-off are acceptable, if the trade-offs are known to the public, but still accepted by it. This concept of "trade-off" makes deciding product liability a more complex process. In the Bowman court, it was thought that the jury should be instructed to consider the probability and seriousness of potential injury, and the ability of the manufacturer to design a safer product without jeopardizing any of the functions and the effectiveness of the product. Opponents of

polycentricity say that when a manufacturer places market considerations before the design of a safe product that is when a design is thought to be liable and unreasonably dangerous.

The Relation of Design and Warning Defects: The failure to warn of an obvious danger in the product is a case of liability, but to warn of an obvious danger that can be avoided through a feasible alternate design can also be seen as liable. Thus placement of written warning labels and notices, does not release the manufacturer of all of their responsibility in the safety of a product. Lack of mechanically engineered warning may also be a case of design defect, as in the case of Simms vs. Thiede (1990). Depending on the situation at hand, the degree of liability due to warning or lack there of is dependant on the view as to whether the warning is adequate and/or the manufacturer neglected to warn the consumer of the dangers.

Obviousness of Danger: Is a manufacturer liable for a product that has obvious dangers, and is misused by the consumer in such a way that he injures himself? That depends on the product and whether adequate safe guards can be implemented and if the dangers were unreasonable. However the obvious danger defense conflicts with the defense of assumption of the risk. To establish assumption of the risk, it must be shown that the plaintiff discovered the defect, fully understood the danger that it presented, and disregarded this known danger and exposed himself to it anyway. In a case of truly obvious danger, the failure to adequately warn of such a danger or hazard that is apparent to the ordinary user is not unreasonably dangerous, as stated by the Tennessee Product Liability Act, Tenn. Code Ann. 29-28-105(d).

Crashworthiness: Crashworthiness is a term used to describe the capability of a product to protect against increased injury from an accident caused by something or someone other than the product. This is mostly used in connection with automobile collisions, as in fuel tank crashworthiness, but may also include such events as when a fire extinguisher fails to work, or a burglar alarm malfunction. Most courts find that most products must be reasonably designed against foreseeable accidents. Injuries resulting from unforeseeable accidents, however, are not the responsibility of the manufacturer.

5.6 Inadequate Warnings and Instructions, and Misrepresentations:

5.6.1 Warnings and Instructions:

In General: A plaintiff is not required to make an election between pursuing a case on a strict products liability theory of either design defect or failure to warn. A plaintiff may proceed with both theories if both are viable. A warning is distinguished from an instruction, in that instructions are calculated primarily to secure the efficient use of a product, while warnings are design to insure safe use. A warning must describe the nature and the extent of the danger involved. For example, a jury could find that a warning on dishwasher soap was inadequate. The warning stated that the soap was corrosive, but it did not warn that the product could cause blindness. Warning may need to detail not only the toxic qualities of the product, but also a safe means of disposal. A manufacturer may be required to warn of the absence of an antidote in the case of a dangerous poison. In addition, it should take into account the environment in which its product will be used when fashioning warnings. In most cases a warning is required in order to enable the plaintiff to use the product in such a way as to avoid a concealed

danger. The plaintiff could not complain that a warning with clearer or stronger content would have made a difference if the plaintiff had failed to read the warning that was given. On the other hand, the plaintiff has the burden of showing that, had a warning been given, it would have caused him/her to avoid the accident. If a danger is obvious, it is not required for a warning to be given, but determining cases of defective design is complicated. Sometimes expert testimony is required to determine the adequacy of warnings to a specialized group, such as doctors.

The Standard of Liability: There is a substantial division of authority regarding whether negligence or a strict liability is to be used in failure to warn cases. With today's world consumers, it is hard from them to protect themselves from risk of serious dangers caused by the products they purchase. The manufacturer is better equipped with the knowledge of the product and can handle with more ease. Therefore, the consumer must rely on the integrity and competency of the business community. In addition, by imposing on the manufacturers the cost of failures to discover hazards, we create an incentive for them to invest more actively in safety research. Liability can also be judged by scientific knowability. If a known defect or hazard could be deemed knowable at the time of production through applying research or performing tests that were available at the time, then the manufacturer is liable and negligent in producing the dangerous product. However, it's hard for juries to understand this "scientific knowability" and judge upon these given complex issues. The effort, time, and money applied to safety research are also analyzed to see if the manufacture put up a decent effort in discovering flaws and defects in their products. The state-of-the-art is usually determined in terms of the scientific or technological knowledge available at a given time, while the negligence

standard of due care is defined in terms of what a person knew, had reason to know, or should have known regarding a danger and the means of avoiding it. These two standards are not necessarily the same, even for a manufacturer with assumed expert knowledge in the field, since the reasonable person cannot always be expected to know that which is knowable.

Persons to be Reached: A warning is mandatory only on specific dangers that an expert is unaware. Commonly experts need not be warned if products they are using are in their field of knowledge. However, there may be specific dangers of which the expert is unaware, and thus needs to be forewarned. An intermediary is required to give warning to the consumers if they have knowledge of the defects, dangers, and/or past accidents. However, some intermediaries have no knowledge of defects. In most cases of doctors prescribing drugs, the warning can be issued to only the doctor; this is called the "learned intermediary rule" for prescription drugs. In some cases, however, the warning has to be given directly to the consumer via package insert or warning, such as in the case where it is foreseeable that a drug will be used or administered without the intervention of a doctor or learned intermediary.

Countervailing Representations: Misrepresentation of a warning can occur when the warning is downplayed or misleading. Counteractive words that describe the products safety, when in fact it was misleading can make the warning more inadequate. In some cases, salespersons, or manufacturer's detail men, emphasize its products effectiveness, while downplaying or not warning of the defects can also count as misrepresentation. Pictures, and/or appearance of safety can also be a misrepresentation of safety if the pictures or appearance show how safe a product is, when actually it isn't.

A variety of circumstances surrounding the packaging, marketing, and appearance of a product may serve to counteract any warnings that are given. Adequacy of a warning depends upon the environment in which the product is marketed.

Post-Sale Duties to Warn: In some cases, a warning is necessary post-sale if a dangerous defect is discovered or known in the product sold. A negligent failure to warn can also exist at the time of sale. The post-sale duty may be greater than one of just warning, as in cases where the product needed to be recalled or repaired. However, in cases where corporation A buys out corporation B, corporation A is not liable for products sold by its predecessor. On the other hand, corporation A, has the obligation to warn of dangers associated with products sold by it's predecessor if they discover a defect in the product sold by it's predecessor.

Allergic Users: Warnings are subjected based on a substantial or appreciable number of persons contingent to the allergy. This is where the defendant should have known of the risk. The definition for substantial or appreciable number is not easy to define. There has been one case where 373 complaints out of 82 million sales were considered sufficient. Common allergies such as eggs or strawberries need not be warned by the seller, but may be requires warning that products contain ingredients that are known allergens.

5.6.2 Misrepresentations:

Misrepresentation can be based on deceit, negligence, strict tort, or strict warranty. There is no need for a defect on a product to be shown other than the plaintiff's injury is caused by misrepresentation of the supplier. Sometimes misrepresentations arise

from the appearance of the product itself. A number of product defenses and liability limitations can be avoided if strict liability for misrepresentation is imposed.

5.7 Problems of Proof:

5.7.1 Cause-in-Fact:

A plaintiff must show that the defect existed when the product left the defendant's control. He must reasonably eliminate alternative causes not attributed to the defendant.

The plaintiff in a strict liability action is not required to disprove every possible alternative explanation of the injury in order to have the case submitted to the jury. The plaintiff need only show that the material fact to be proved may be logically and reasonably be inferred from the circumstantial evidence.

Some count have rejected the market share basis of liability for similar products that have varying degrees of harmfulness, on the ground that the market proportion rationale is inapplicable since the proportion of the market sold does not necessarily reflect the proportion of injuries likely caused by a defendant.

Often the concept of foreseeability is used to describe occurrences that can reasonably be anticipated, while proximate cause is used to describe occurrences that are the "direct", "natural", or "probable" result of another event.

5.7.2 Proximate Cause and Foreseeability:

In "strict liability the knowledge of the article's propensity to inflict harm as it did is assumed regardless of whether the manufacturer or seller foresaw or reasonably should have foreseen the danger." But before a manufacturer or other seller is strictly liable for injury inflicted by a product, the product must be foreseeable, while only foreseeability of use is required in strict liability. **Misuse:** Affirmation defense by some courts. Misuse is not treated as a bar to recovery unless it is considered unforeseeable. Unforeseeable misuse is considered a bar. Misuse, when attributable to the plaintiff rather than a third person is closely related to contributory negligence and assumption of the risk. The fact that the plaintiff himself is guilty of criminal conduct in his acquisition or use of a product will not necessarily bar his recovery on the grounds of unforeseeable contributory negligence or assumption of the risk (Rest 2d of Torts 889).

Alteration: A special problem of misuse concerns the alteration of a product. A substantial alteration that causes the accident may be unforeseeable, barring recovery, unless the alteration should have been anticipated because of the characteristics of the product that invite or encourage the change. Where a defendant furnishes a defectively constructed product, it is foreseeable that the product may be defectively modified in an attempt to correct the original defect.

Damages: Sec. 435 of the Rest. 2d of Torts states, 1. If the actor's conduct is a substantial factor in bringing about harm to another, the fact that the actor neither foresaw nor should have foreseen the extent of the harm or the manner in which it occurred does not prevent him from being liable. 2. The actor's conduct may be held not to be a legal cause of harm to another where after the event and looking back from the harm to the actor's negligent conduct, it appears to the court highly extraordinary that it should have brought about the harm.

5.7.3 Plaintiff Misconduct, and Comparative Fault:

Three types of plaintiff misconduct that can bar or limit the plaintiff's right to recovery are:

- 1. **Contributory negligence:** the failure of the plaintiff to take reasonable actions for his own safety.
- 2. Assumption of the risk: a knowing and voluntary confrontation of an appreciated risk.
- 3. **Misuse including alteration of the product:** the use of a product in a foreseeable or unforeseeable manner.

Contributory negligence and assumption of the risk are usually treated as defenses, with the burden of proof on the defendant. Contributory negligence is determined by a reasonable person standard, based on the knowledge of the plaintiff. The danger can be latent, but discovered by the plaintiff. A plaintiff may be aware of one risk without appreciating another.

The effect of plaintiff misconduct in strict liability: Some courts hold that contributory negligence is no defense in a strict products liability action, but that assumption of the risk is a defense. Contributory negligence of the plaintiff is not a defense when such negligence consists merely of a failure to discover the defect in the product, or to guard against the possibility of its existence.

Comparative Fault: Comparative fault has been widely adopted, either by statute or judicial decision. Three principle patterns of comparison: 1. Her fault is less than that of the defendant. 2. If it is not more than that of the defendant. 3. If the defendant is at fault to any degree.

Pure comparative fault is preferred by commentators and is the method usually chosen by judicial adoption. If the plaintiff is permitted to recover, their recovery will be proportionally reduced by the percentage of the fault, if any, attributable to themselves. Thus a plaintiff found 30% at fault can recover 70% of the damage.

Where there is more than one defendant, the general rule is to retain joint and several liabilities in comparative fault.

The reasons for retaining joint liability in a comparative fault, even where the plaintiff is also at fault: 1. The feasibility of apportioning fault on a comparative basis does not render an indivisible injury "divisible" for purposes of the joint and several liability rules. 2. In those instances where the plaintiff is not guilty of negligence, he would be forced to bear a portion of the loss should one of the tortfeasors prove financially unable to satisfy his share of the damages. 3. Even in cases that share a plaintiff is partially at fault, his culpability is not equivalent to that of the defendant. The plaintiff's negligence relates only to a lack of due care for his own safety, while the defendant's negligence relates to a lack of due care for the safety of others; the latter is tortuous, but the former is not. 4. Elimination of joint and several liabilities would work a serious and unwarranted deleterious effect on the ability of an injured plaintiff to obtain adequate compensation for his injuries.

Comparative fault is widely applied to unreasonable assumption of the risk. Some courts apply comparative fault to conduct based on plaintiff misuse of the product. Some courts compare relative fault, others relative causation, and still others a combination of these factors in determining comparative fault or comparative responsibility. Some states by statute apply comparative fault to strict liability action.

5.7.4 Subsequent Remedial Measures:

Evidence of the subsequent measures is not admissible to prove negligence or culpable conduct in connection with the event. This rule does not require the exclusion of evidence of subsequent measures when offered for another purpose, such as proving ownership, control, or feasibility of precautionary measures, if controverted, or impeachment. The rule is generally held to exclude evidence of remedial measures only if taken by the defendant after the plaintiff's injury, and it does not exclude evidence of such measures taken before the injury.

The rule does not exclude:

Evidence of remedial measures taken by one other than the defendant.

Evidence of remedial measures taken a defendant after the plaintiff's accident when these measures are involuntarily undertaken. The rule does not apply unless the evidence concerns conduct that can fairly be described as a remedial measure.

Evidence of subsequent remedial measures may be admitted, even in a negligence case, if offered for some purpose other than that of showing negligence or culpable conduct.

R.407 states that evidence of subsequent remedial measures is admissible when offered to prove "feasibility of precautionary measure, if controverted, or impeachment." The feasibility of providing a safer design or warning is often a principle issue in product litigation.

5.7.5 Miscellaneous Problems of Proof:

History of unsafe and safe use: Evidence of unsafe use and of prior accidents with similar products is admissible for a variety of purposes, which include proof of

notice of the alleged defect by the defendant, the magnitude of the danger, the forseeability of user conduct, the defendant's ability to correct the defect, and causation.

Spoliation: It occurs when a person willfully or negligently disposes of product evidence vital to a litigant's case. The person who disposes of the evidence may be held liable to the litigant for the damages they likely could have recovered. The disposer may be the product supplier or another owing a duty to preserve the evidence.

Expert Testimony: Expert testimony may be essential in a products liability lawsuit to establish a prima facie case of defectiveness, causation, damage, and other issues in the suit. Expert testimony is admissible if it will aid the fact finder in its determination of an issue in the suit. Experts may be laypersons, in the sense of lacking academic credentials, provided they have acquired specialized knowledge through experience with a product.

State of the Art and Industry Custom: Courts have difficulty distinguishing between state of the art and the industry custom, and a number of counts permit evidence of industry custom to show state of the art. State of the art is defined as the scientific or technological knowledge available or existing when a product is marketed.

Codes, Reports, and Technical Literature: Safety codes drawn up by industry sponsors associations are admissible on the issue of defectiveness, due care, and other disputed issues in a case.

Discovery: The use and abuse of discovery have become controversial issues in civil litigation, including product liability.

Chapter 6: Mike Heath vs. Vermeer Manufacturer Company

Preface:

Unlike the two previous cases, which were very clear as to who was at fault, this case was very hard to decide exactly who was in the wrong. Using some information from the *Products Liability in a Nutshell* book, we were able to look at only the necessary information and focus our attention on who really is liable for the accident.

Introduction

The case of Mike Heath versus Vermeer Manufacturer Company looks at an accident that occurred on April 1, 1996. At the time of the accident, the plaintiff was operating a tree spade, The Digging Dutchman with tractor, model number M-485 series 338, when his hand was severely injured. His hand was partially amputated when it was caught in an unguarded pinch point, which is created when the spade was raised. Mr. Heath is suing Vermeer Manufacturing Company on three separate counts of negligence. Count 1: The plaintiff claims that the defendant was negligent in the design, manufacturing, selling, and distributing of aforementioned machine, or reasonable care should have known that the design of the machine was defective and would result in a dangerous product. Count 2: The plaintiff claims that the defendant was negligent for carelessly failing to warn the plaintiff of foreseeable dangers inherit in the usage of the machine. Count 3: The plaintiff claims that the defendant has breached its implied warranty stating that the machine was fit for the purpose for which it was intended and was of merchantable quality. Also the defendant failed to provide the relief desired by the plaintiff in violation of Massachusetts General Law Chapter 39A.
Facts and Standards:

Reach of Mr. Heath:94 inchesHeight of nip point with machine at rest:72 inchesHeight of nip point with machine running:96 inchesThe machine was obviously not guarded in the area where the accident occurred.However this statement can be disregarded right away due to one of the OSHA standards.

To safeguard a machine by location, the machine or its dangerous moving parts must be so positioned that hazardous areas are not accessible or do not present a hazard to a worker during the normal operation of the machine. (OSHA #3067)

Depositions

William G Dobson:

Mr. William G Dobson is the expert witness for the plaintiff, Mike Heath. Mr. Dobson is a professional engineer for Binary Engineering Associates. Upon inspection of the machine, he states that it is clear that there was a pinch point and that the problem is a responsibility of Vermeer to eliminate the hazard. He also states that Vermeer is negligent on two occasions. First, the spade and spade frame make a pinch point. Second, the overall machine is defective. The plaintiff could neither hear nor see any warning from the operator while in use. While inspecting the machine, Mr. Heath had demonstrated to Mr. Dobson his exact position at the time of the accident, which was standing on the ground directly next to the machine, and not on the machine itself. Also, the machine was measured. By his measurements, the blade was 92 inches off of the ground. And by his research, he found that 95th percentile man can reach 94 inches and

that a man of Heath's size can in fact reach 92 inches. He states that there is a design defect on this machine. He states, "Design defect is the existence of a nip point that's unguarded, regardless of who is using it and where that person is standing." Finally he states that "guarding by location," which is when the hazard is too far away for one to be hurt in a normal situation, is a bogus practice.

Dr. Thomas Echeverria

Mr. Echeverria is not an expert witness, however he is Mr. Heath's doctor. He inspected Mr. Heath's left hand crush injury and the diagnosis was a transverse displaced fracture. He also states that even after three separate surgeries, Mr. Heath was left with significant functional and sensory loss of left hand and severe scarring and disfigurement. These are a direct result of the accident.

Ivan Brand

Mr. Brand is an employee for Vermeer Manufacturing Company, in their product safety department. He is on record stating that the defendant preformed no tests in the concentration of user hand safety. Also that the product has never been serviced, inspected, examined or tested by an engineer or knowledgeable person on the behalf of Vermeer. However, within the last 10 years, there have been no complaints, no similar injury has ever occurred, and no claim of defect has ever surfaced. He claims that the design of the machine puts the pinch point in an area higher than a foreseeable zone of reach when using the machine, and that it was the fault of Jay Stafford, the machine operator at the time, for allowing Mr. Heath inside of the machine platform.

Michael Heath

Prior to the accident Mr. Heath has had a bad history. He has never really held down a steady job, but instead would move from job to job. He has had a lot of trouble at home and his criminal record includes loss of license and possession of illegal drugs. From 1996 to 1998 he has not been able to work, partly because of jail time and partly due to surgery on his hand. He is currently getting workman's compensation from the nursery he worked at

His hand is now permanently disfigured. He cannot flex his hand to full capacity nor does he have normal feeling in his left hand. He has been working at this job for the last five days. His job at the time of the accident is to stabilize the tree while they are being moved. He had done this about 15 to 20, prior to the accident, that morning. The injury, he claims, occurred at about forehead level. Although he was aware of the danger he kept his hand there and even states that he was careless and he would have avoided the accident if he had put his other hand in first.

Conclusion

A close examination of this case would reveal that Mr. Heath was acting carelessly while doing his job and that is why he lost his fingers. Vermeer cannot be responsible for someone who is acting dangerously around there machines. Mr. Heath even admits to the fact that he was careless and knew of ways in which the accident could have been avoided. Also he claims that he was on the ground when the accident occurred and that his hand was at forehead level. What Mr. Dobson failed to inspect was how high the machine was at operating level. If the machine was at rest and shut off there would be a

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tremendous danger regarding the nip point that Mr. Heath caught his hand in. However since the accident occurred while in operation, and now the nip point is at a height, which cannot be reached unless you are standing on the machine. There is no argument that the machine was on and running. Where the discrepancy lies is where was Michael Heath at the time of the accident. If his hand was in fact at forehead level when it got caught then he must have been standing on the machine while it was operating.

There are three types of plaintiff misconduct that can bar or limit the plaintiff's right to recovery. They are contributory negligence, assumption of the risk, misuse including alteration of the product. Michael Heath violated all three counts. First, contributory negligence, because he failed to take reasonable actions for his own safety. Second, assumption of the risk, because he knew about the risk involved and voluntarily confronted it. Third, misuse including alteration of the product, because he was using the product in an unforeseeable manner. Keeping in mind all these facts Vermeer cannot be held responsible for the actions of Mr. Heath and therefore no money shall be rewarded.

Chapter 7: Trial Summary and Conclusions

Trial Summary:

The mock trial, which took place at the end the Product Liability project, was an informal presentation of the three cases, which we reviewed to an unbiased jury of peers. On each of the three cases we chose a side, which we wanted to defend, whether it is the plaintiff's side or the defendant's side. So cases by case we would present our side of the trial to the jury and at the end they went as a group to decide what the outcome of each case should be.

For the first case, Robert Ortiz vs. B.M. Root Co. and Boshco Inc. the jury agreed that the plaintiff was at fault and should be rewarded no money. The real outcome of the case was that Mr. Ortiz was awarded \$80,000.

The second case, Mrs. LaFlamme vs. Daimler Chrysler and Prime Automotive, the jury felt that Mrs. LaFlamme should be awarded 100,000 which would be spit into 70% Chrysler and 30% Prim Automotive. In this case the real outcome was settled out of court and the amount is unknown because Chrysler does not like to reveal how much money they have given in a settlement.

In the third case, Michael Heath vs. Vermeer Manufacturer Company, the jury felt that Mr. Heath should be awarded no money. The real outcome of this case was that Michael Heath received \$80,000.

Conclusion:

The purpose of this project is to give the student a general exposure to the relationship between law and technology. With that exposure, I feel that Professor Hagglund chose these particular cases because of the nature of each one. They were all Product Liability cases, however the three cases were all very different from each other. The first case the plaintiff was clearly in the wrong, while in the second case the defendant was clearly in the wrong and on the third case it was split half and half. These three cases gave us a look on the entire spectrum of Product Liability cases. The two books, *Product Liability in a Nutshell* and *An Engineer in the Courtroom*, helped us understand what Product Liability is and what role an engineer has in these specific cases.