** NOT FOR PRINTED PUBLICATION **

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
BEAUMONT DIVISION

DR. MARK A. BARRY,	§	
	§	
Plaintiff,	§	
	§	CIVIL ACTION No. 1:14-CV-104
v.	§	
	§	JUDGE RON CLARK
MEDTRONIC, INC.,	§	
	§	PRD
Defendant.	§	

JURY INSTRUCTIONS

MEMBERS OF THE JURY:

You have now heard the evidence in this case. I will now instruct you on the law that you must apply. It is your duty to follow the law as I give it to you. However, you the jury, are the sole judges of the facts. Do not consider any statement that I have made during the trial or that I make in these instructions as an indication that I have any opinion about the facts of this case.

After I give you these instructions, the attorneys will make their closing arguments. Statements and arguments of the attorneys are not evidence and are not instructions on the law. They are intended only to assist you in understanding the evidence and the parties' contentions.

When words in these instructions are used in a sense that varies from their

commonly understood meaning, I am giving you the proper legal definition, which you are bound to accept in place of any other meaning. The other words in these instructions provided to you have the meaning commonly understood.

You will be given a verdict form with several questions. Answer each question based on the facts as you find them. Do not decide who you think should win and then answer the questions accordingly. Your answers and your verdict must be unanimous.

You will be instructed to answer some questions based upon a "**preponderance of the evidence.**" This means you must be persuaded by the evidence that what the party seeks to prove is more likely true than not true. You will be instructed to answer other questions by "**clear and convincing evidence.**" This is a higher burden than by a preponderance of the evidence, but it does not require proof beyond a reasonable doubt. Clear and convincing evidence is evidence that produces in your mind a firm belief or conviction as to the matter at issue.

In deciding whether any fact has been proved in the case, you may, unless I have instructed you otherwise, consider the testimony of all witnesses, including those called by deposition, regardless of who may have called them, all exhibits received in evidence, regardless of who may have produced them, and the facts to which the parties have stipulated. A list of facts to which the parties have agreed,

or stipulated, is attached as **Appendix A** to these instructions. This is the same list that is found in the "Stipulated Facts" section of your juror notebooks. You must treat all of the stipulated facts as having been proved.

In determining the weight to give to the testimony of a witness, you should ask yourself whether there was evidence tending to prove that the witness testified falsely concerning some important fact, or whether there was evidence that at some other time, the witness said or did something, or failed to say or do something, that was different from the testimony the witness gave before you during the trial.

You should keep in mind, of course, that a simple mistake by a witness does not necessarily mean that the witness was not telling the truth as he or she remembers it, because people may forget some things or remember other things inaccurately. So, if a witness has made a misstatement, you need to consider whether that misstatement was an intentional falsehood or simply an innocent lapse of memory, and the significance of that may depend on whether it has to do with an important fact or only with an unimportant detail.

If scientific, technical, or other specialized knowledge may be helpful to the jury, a witness with special training or experience may testify and state an opinion concerning such matter. Those witnesses testified about their opinions concerning matters at issue in this case. However, you are not required to accept those opinions. You should judge such testimony like any other testimony. You may

accept it or reject it, and give it as much weight as you think it deserves, considering the witness's education and experience, the soundness of the reasons given for the opinion, and all the other evidence in the case. In deciding whether to accept or rely upon the opinion of such a witness, you may consider any bias of the witness that you may infer from the evidence, including any bias you may infer from evidence that the witness has been or will be paid for reviewing the case and testifying, or from evidence that he or she testifies regularly.

In making up your mind and reaching your verdict, do not make your decisions simply because there were more witnesses on one side than on the other. Do not reach a conclusion on a particular point just because there were more witnesses testifying for one side on that point. The testimony of a single witness may be sufficient to prove any fact, even if a greater number of witnesses may have testified to the contrary, if after considering all the other evidence you believe that single witness.

While you should consider only the evidence in this case, you are permitted to draw such reasonable inferences from the testimony and exhibits as you feel are justified in the light of common experience. In other words, you may make deductions and reach conclusions that reason and common sense lead you to draw, from the facts that have been established by the testimony and evidence in the case.

There are two types of evidence that you may consider in properly finding

the truth as to the facts in the case. One is **direct evidence**, such as testimony of an eyewitness. The other is **indirect** or **circumstantial evidence**, which is the proof of a chain of circumstances that indicates the existence or nonexistence of certain other facts. As a general rule, the law makes no distinction between direct and circumstantial evidence, but simply requires that you find the facts from all the evidence, both direct and circumstantial.

During the trial, I sustained objections to certain questions. You must disregard those questions entirely. Do not speculate as to what the witness would have said if he or she had been permitted to answer the question.

Certain slides shown to you are illustrations of the evidence, but are not themselves evidence. These slides are often called "**demonstratives**." A demonstrative is a party's description, picture, or model used to describe something involved in this suit. If your recollection of the evidence differs from the demonstrative, rely on your recollection of the evidence that was admitted.

Also, do not assume from anything I may have done or said during the trial that I have any opinion concerning any of the issues in this case. Except for the instructions to you on the law, you should disregard anything I may have said during the trial in arriving at your own findings as to the facts.

If you have taken notes they are to be used only as aids to your memory, and if your memory should be different from your notes, you should rely on your

memory and not on your notes. If you did not take notes, rely on your own independent memory of the testimony. Do not be unduly influenced by the notes of other jurors. A juror's notes are not entitled to any greater weight than the recollection of each juror concerning the testimony.

SUMMARY OF THE CONTENTIONS

I will first give you a summary of each side's contentions in this case. I will then provide you with detailed instructions on what each side must prove to win on each of its contentions.

Dr. Barry seeks money damages from Medtronic for allegedly infringing claims 4 and 5 of the '358 patent and Claims 2, 3, and 4 of the '121 patent. These may be called the "**asserted claims**." Dr. Barry argues that Medtronic has actively induced infringement of the asserted claims by encouraging others to use the patented methods through Medtronic's sale of the accused products. The **"accused methods"** in this case are the use of the components in the Medtronic Vertebral Column Manipulation, or VCM, instrument sets with product numbers SPS00L62 and SPS00M62, which are referred to as the CD Horizon Legacy Spinal System VCM instrument sets, and product number SPS02365, which is referred to as the CD Horizon Solera Spinal System VCM instrument set. The **"accused systems"** in this case are the components in the Medtronic VCM instrument sets with product numbers SPS00L62 and SPS00M62, the CD Horizon Legacy Spinal

System VCM instrument sets, and product number SPS02365, the CD Horizon Solera Spinal System VCM instrument set. The "**accused systems**" are sometimes referred to as the "**accused products**." The VCM instrument sets are also known as the "**VCM kits**."

Medtronic denies that it has infringed or is infringing the asserted claims of the '358 and '121 patents and argues that, in addition, the asserted claims are invalid.

Your job is to decide whether Medtronic has infringed one or more of the asserted claims of the '358 and '121 patents and whether any of the asserted claims of the '358 patent or the '121 patent are invalid. If you decide that Dr. Barry has proven by a preponderance of the evidence that any claim of the '358 patent or the '121 patent has been infringed and you also decide that Medtronic has not proven by clear and convincing evidence that the claim is invalid, you will then need to decide any money damages to be awarded to Dr. Barry to compensate him for the infringement. You will also need to make a finding as to whether the infringement was willful.

CLAIM INTERPRETATION

Before you can decide many of the issues in this case, you will need to understand the role of patent "**claims**." The patent claims are the numbered sentences at the end of each patent. The claims are important because it is the words of the claims that define what a patent covers. Each claim is effectively treated as if it were a separate patent, and each claim may cover more or less than another claim. Therefore, what a patent covers depends, in turn, on what each of its claims covers.

The figures and text in the rest of the patent provide a description and/or examples of the inventions claimed and provide a context for the claims, but it is the claims that define the breadth of the claims' coverage. A figure in a patent may provide an example of the invention; but it does not define what is covered by any claim. It is the claim language that defines the invention.

You will first need to understand what each claim covers in order to decide whether or not there is infringement of the claim and to decide whether or not the claim is invalid.

Claim Construction and "Person Having Ordinary Skill In the Art"

It is my job as judge to provide to you the meaning of any claim language, or words in the claims, that must be interpreted. You must accept the meanings I give you and use them when you decide whether any claim has been infringed

and whether any claim is invalid. The words and phrases I have defined are attached as **Appendix B**. These are the same definitions found in the "Claim Chart" section of your juror notebooks.

If I have not given a meaning for other words and terms of the patents, they must be given their ordinary and accustomed meaning as understood by **a person having ordinary skill in the art**, in the context of the patent specifications and file history. The parties have agreed upon what it means to be "a person having ordinary skill in the art," (PHOSITA) in this case. That definition is attached as **Appendix C**. It is the same definition that appears in the Patent Term Glossary in your juror notebooks.

How a Claim Defines What a Claim Covers

A claim sets forth, in words, a set of requirements. Each claim sets forth its requirements in a single sentence. If a device or a method satisfies each of these requirements, then it is covered by the claim.

There can be several claims in a patent. The coverage of a patent is assessed claim-by-claim. In patent law, the requirements of a claim are often referred to as "**claim elements**" or "**claim limitations**." When an accused method or system meets all of the requirements of a claim, the claim is said to "**cover**" that accused method or system and it is said to "**fall**" within the scope of that claim. In other

words, a claim covers a method or system where each of the claim elements or limitations is present in that method or system.

By understanding the meaning of the words in a claim and by understanding that the words in a claim set forth the requirements that a method or system must meet in order to be covered by that claim, you will be able to understand the scope of coverage for each claim. Once you understand what each claim covers, then you are prepared to decide the issues that you will be asked to decide, such as infringement and invalidity.

INFRINGEMENT

Patent law gives the owner of a patent the right to exclude others from importing, making, using, offering to sell, or selling his/her invention within the United States during the term of the patent. Any person or business entity that has engaged in any of those acts without the patent owner's permission infringes the patent.

A patent may be infringed directly or indirectly. In this case, Dr. Barry has alleged that Medtronic is liable for indirect infringement because Medtronic's customers, mainly surgeons, directly infringe the asserted claims of the '358 and the '121 patents, and Medtronic actively induces that direct infringement by its customers. Dr. Barry has also alleged that Medtronic is liable for infringement

through the supply of components from the United States for combination outside of the United States.

In order to prove infringement under either of these theories, Dr. Barry must prove the requirements for infringement are met by a preponderance of the evidence, i.e., that it is more likely than not that the requirements of that type of infringement have been proven. Infringement can be proven by direct or by circumstantial evidence.

Direct Infringement

I will first explain direct infringement.

In order to prove direct infringement, Dr. Barry must prove by a preponderance of the evidence i.e., it is more likely than not, that at least one surgery was performed using Medtronic's accused methods in which each and every step of claims 4 or 5 of the '358 patent was satisfied, or that the accused systems include each component of the systems claimed in claims 2, 3, or 4 of the '121 patent, without the permission of Dr. Barry. You must compare the accused methods and systems with each and every one of the requirements of a claim to determine whether all of the requirements of that claim are met. You must determine, separately for each asserted claim, whether or not there is infringement.

Means-Plus-Function Clause

Claims 1 and 3 of the '358 patent and claims 1 and 3 of the '121 patent

contain **means-plus-function clauses**. For a short explanation of these means-plus-function clauses, refer to **Appendix B** of these instructions, which is the chart of claim terms, **at page 2**. In deciding whether Dr. Barry has proven that one or more steps of Medtronic's accused methods or one or more components of Medtronic's accused systems satisfies a means-plus-function clause, you must first decide whether the Medtronic Vertebral Column Manipulation, or VCM, instrument sets with product numbers SPS00L62, SPS00M62 (CD Horizon Legacy Spinal System VCM instrument set), or SPS02365 (CD Horizon Solera Spinal System VCM instrument set):

(1) performs the recited function of "securing the pedicle screw and spinal rod in a substantially fixed position and orientation"; and

(2) is identical or equivalent to the structure described in the patent specification and drawings for performing this recited function, namely:

1. a two-piece nut and screw;
2. a locking nut;
3. a rotatable locking element embedded within a spinal rod conduit; or
4. a rotatable bridge structure that can fasten to the inner walls of the spinal rod conduit.

If you find that the Medtronic Vertebral Column Manipulation, or VCM, instrument sets with product numbers SPS00L62, SPS00M62 (CD Horizon Legacy Spinal System VCM instrument set), and SPS02365 (CD Horizon Solera Spinal System VCM instrument set) do not have any structure performing the specific

function I just described, the claim containing that means-plus-function requirement is not infringed.

Even if you find that an accused method or system includes some structure that performs this specific function, you must also decide whether the structure in the accused method or system is the same as or **equivalent** to the structure recited in the specification for performing this specific function. Whether the structure of the accused product is equivalent to a structure described in the patent specification is decided from the perspective of a person having ordinary skill in the art.

If a person having ordinary skill in the art would consider the differences between the structure found in the accused products and a structure described in the patent specification to be insubstantial, the structures are **equivalent**. One way of showing that an element is only insubstantially different is to show that it performs the same function, in substantially the same way, to achieve substantially the same result as would be achieved by the element that is not literally present in the accused structure.

If you find that either the recited structure is not performed or that the structure in Medtronic's product that performs this specific function is not the same and is not equivalent, you must find that the claim containing the means-plus-function limitation is not infringed.

Infringement of Dependent Claims

This case involves two types of patent claims: independent claims and dependent claims.

An "**independent claim**" sets forth all of the requirements that must be met in order to be covered by that claim. Thus, it is not necessary to look at any other claim to determine what an independent claim covers. In this case, claim 2 of the '121 Patent is an independent claim.

The asserted claims of the '358 patent and the remainder of the asserted claims in the '121 patent are "**dependent claims.**" A dependent claim does not itself recite all of the requirements of the claim but refers to another claim for some of its requirements. In this way, the claim *depends* on another claim. A dependent claim incorporates all of the requirements of the claim or claims to which it refers. The dependent claim then adds its own additional requirements. To determine what a dependent claim covers, it is necessary to look at both the dependent claim and any other claims to which it refers. A method or system that meets all of the requirements of both the dependent claim and the claim or claims to which it refers is covered by that dependent claim.

To establish infringement of claim 4 of the '358 patent, Dr. Barry must show that it is more likely than not that at least one surgery was performed using Medtronic's accused methods in which each and every step of claims 1, 2, 3, and 4

was performed. For claim 5, Dr. Barry must show that it is more likely than not that at least one surgery was performed using Medtronic's accused methods that included each and every step of claims 1, 2, and 5.

For the '358 patent, if you find that any of the claims from which claims 4 and 5 depend are not infringed, then you must find that claim 4 and/or claim 5 is also not infringed. On the other hand, if you find that independent claim 1 is infringed, you must still decide whether the additional requirements of any claims that depend from it have also been infringed.

To establish infringement of claims 2, 3, and 4 of the '121 patent, Dr. Barry must show that it is more likely than not that at least one surgery was performed using Medtronic's accused systems that included each of the components of claim 2 for infringement of that claim, claims 2 and 3 for infringement of claim 3, and claims 2, 3, and 4 for infringement of claim 4.

For the '121 patent, if you find that any of the claims from which claims 3 and 4 depend are not infringed, then you must find that claim 3 and/or claim 4 are also not infringed. On the other hand, if you find that independent claim 2 is infringed, you must still decide whether the additional requirements of any claims (e.g. claims 3 and 4) that depend from it have also been infringed. Since independent claim 2 does not depend from any claims, finding that each component of claim 2 is infringed is sufficient as to that claim.

Open Ended or "Comprising" Claims

The **preamble** refers to the first few words that appear in each claim. The "preamble" to claims 1, 2, and 3 of the '358 patent and claims 2 and 3 of the '121 patent ends with the term, "comprising." "**Comprising**" means "including" or "containing but not limited to." Thus, if you decide that an accused system or method includes all the requirements in that claim, the claim is infringed. This is true even if the accused system or methods include components or steps in addition to those requirements. For example, a claim to a table comprising a tabletop, legs, and glue would be infringed by a table that includes a tabletop, legs, and glue, even if the table also includes wheels on the table's legs.

In this case, the preambles are not **independent limitations**, or elements of the claim that must be found in an accused method or system in order for that product to be infringing.

INDUCED INFRINGEMENT

Dr. Barry alleges that Medtronic is liable for infringement by actively inducing someone else to directly infringe the asserted claims of the '358 and '121 patents in the United States. As with direct infringement, you must determine whether there has been active inducement on a claim-by-claim basis.

Medtronic is liable for "**active inducement**" of a claim only if Dr. Barry proves by a preponderance of the evidence that:

1. the acts are actually carried out by those surgeons using the accused Medtronic products and the acts directly infringe that claim;
2. Medtronic took action during the time the asserted patent or patents were in force intending to cause the infringing acts by those using the accused products; and
3. Medtronic was aware of either the '358 or the '121 patent, depending on which asserted claims you are considering, and knew that the acts, if taken, would constitute infringement of that patent or that Medtronic believed there was a high probability that the acts by those using the accused products would infringe a patent and Medtronic took deliberate steps to avoid learning of that infringement.
4. If you find that Medtronic was aware of the patent, but believed that the acts it encouraged did not infringe that patent, Medtronic cannot be liable for inducement.

In order to establish active inducement of infringement, it is not sufficient that those using Medtronic's accused products themselves directly infringe the claim. Nor is it sufficient that Medtronic was aware of the acts by those using Medtronic's accused products that allegedly constitute the direct infringement. Rather, in order to find active inducement of infringement, you must find either that Medtronic specifically intended those using the accused products to infringe the '358 or '121 patent or that Medtronic believed there was a high probability that those using its products would infringe the '358 or the '121 patent, but deliberately avoided learning the infringing nature of the acts of those using its products. The mere fact, if true, that Medtronic knew or should have known that there was a

substantial risk that the acts of those using its accused products would infringe the patent is not sufficient for active inducement of infringement.

INFRINGEMENT OUTSIDE THE UNITED STATES

Dr. Barry also asserts that Medtronic infringed the '121 patent by supplying or causing to be supplied from the United States to another country all or a substantial portion of the components of the accused products, and actively inducing the assembly of those components into a system that would infringe the '121 patent if they had been assembled in the United States.

Medtronic is liable for infringement under Section 271(f)(1) if Dr. Barry proves by a preponderance of the evidence that:

1. Medtronic supplies or causes to be supplied from the United States to a place outside the United States components, which make up all or a substantial portion of the invention of any one of claims 2, 3, or 4 of the '121 patent;
2. Medtronic takes action intentionally to cause another to act by using the accused products outside of the United States to assemble the components;
3. Medtronic knew of the '121 patent at the time it supplied the components overseas, and knew that the encouraged acts constitute infringement of that patent; and
4. The encouraged acts would constitute direct infringement of the claim if they had been carried out in the United States.

If you find that Medtronic was aware of the patent, but believed that the acts it encouraged would not constitute infringement of the patent if carried out in the United States, Medtronic cannot be liable for inducement.

In order to establish active inducement of infringement, it is not sufficient that a surgeon using Medtronic's accused products allegedly directly infringes the claim. Nor is it sufficient that Medtronic was aware of the acts that allegedly constitute the direct infringement by the third party. Rather, you must find that Medtronic specifically intended for a surgeon or surgeons using Medtronic's accused products to infringe the '121 patent, in order to find inducement of infringement. If you do not find that Medtronic specifically intended to cause a particular person to infringe after the date the patent was issued, then you must find that Medtronic has not actively induced the alleged infringement under Section 271(f)(1).

WILLFUL INFRINGEMENT

If you find it more likely than not that Medtronic infringed any claim of the patents-in-suit, then you must also determine whether Medtronic's infringement was willful. Dr. Barry must prove by a preponderance of the evidence that Medtronic's infringement of the '358 patent and/or '121 patent was willful. Willful infringement is action by Medtronic with wanton disregard for Dr. Barry's patent rights, and may also be infringement that is in bad-faith, deliberate, or flagrant. In determining whether Medtronic acted willfully, you must consider the totality of the circumstances surrounding the infringement of Dr. Barry's patents, including but not limited to the following factors:

1. Whether Medtronic acted in a manner consistent with the standards of commerce for its industry;

2. Whether Medtronic intentionally copied the technology covered by Dr. Barry's asserted patents;

3. Whether or not Medtronic made a good-faith effort to avoid infringing the patent, for example by taking remedial action upon learning of the '358 patent and '121 patent, including ceasing infringing activity or attempting to design around the patents;

4. Whether Medtronic reasonably believed, at the time of its accused conduct, that it had a substantial defense to infringement and reasonably believed that the defense would be successful if litigated. Because this determination is based on Medtronic's actual knowledge at the time of its accused conduct, Medtronic cannot rely on a defense to infringement at trial that was not previously known to it; and

5. Although there is no obligation to obtain an opinion of counsel, whether Medtronic obtained and relied on a legal opinion that was well-supported and believable, and advised Medtronic (1) that its products did not infringe either of Dr. Barry's patents, or (2) that either or both of Dr. Barry's patents were invalid or unenforceable.

In considering the totality of the circumstances as to whether Medtronic acted willfully, you may consider as one factor whether Medtronic obtained a competent legal opinion about Dr. Barry's patents. The absence of a legal opinion is one factor that may be considered.

You may not assume that merely because Medtronic did not obtain a legal opinion, that the opinion would have been unfavorable. The absence of a lawyer's opinion is not sufficient for you to find that Medtronic acted willfully. Rather, the issue is whether Medtronic had a good faith belief that it was not infringing or that the asserted patent claims were invalid. An opinion of counsel is not necessary for

Medtronic to establish this defense.

INVALIDITY

Patent invalidity is a defense to patent infringement. Each claim of a patent is presumed valid independently of the validity of the other claims. In making your determination as to whether a patent claim is valid or invalid, you must consider each patent separately, and each of the claims of a patent separately and individually.

To prove that any claim of a patent is invalid, Medtronic must persuade you by clear and convincing evidence, i.e., you must be left with a clear conviction that the claim is invalid.

I previously explained the two different types of claims in the patent, "independent claims" and "dependent claims." You must evaluate the validity of each asserted claim separately. Even if an independent claim is invalid, this does not mean that the dependent claims that depend from it are invalid. Rather, you must consider the validity of each claim separately, on a claim-by-claim basis. However, if you find that a dependent claim is invalid, then you must find that each claim from which it depends is also invalid since the dependent claim includes all of the elements of the independent claim or other dependent claims from which it depends.

The question of invalidity of a patent claim is determined from the

perspective of a person of ordinary skill in the art in the field of the asserted invention as of December 30, 2004.

Public Use

I will now instruct you on the law underlying Medtronic's contention that claims 4 and 5 of the '358 patent are invalid because the methods defined in those claims were in public use by Dr. Barry in the United States before December 30, 2003, more than one year before Dr. Barry filed his patent application on December 30, 2004.

A patent claim is invalid if more than one year before the filing date of the patent, an embodiment of the claimed invention was both:

1. ready for patenting; and also
2. accessible to the public.

Now, I will instruct you on what it means to be "**ready for patenting**."

First, you need to understand that an invention is "**reduced to practice**" either when:

1. The invention has been constructed, used, or tested sufficiently to show that it will work for its intended purpose; or
2. The inventor files a patent application with the Patent and Trademark Office.

An invention may be reduced to practice even if the inventor has not made or tested a prototype of the invention if it has been fully described in a filed patent application.

An invention is "**ready for patenting**" either when:

1. it is reduced to practice; or
2. the inventor has prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person of ordinary skill in the art to practice the invention.

In either case, the claimed invention is ready for patenting when there is reason to believe it would work for its intended purpose.

Next, I will instruct you on what is required for Medtronic to show that the invention was "**accessible to the public.**" There are several factors you may consider in determining whether Medtronic has proven that Dr. Barry's inventions were "**accessible to the public.**" These include:

1. the nature of the activity that occurred in public;
2. the public access to and knowledge of the public use;
3. whether any confidentiality obligations were imposed upon observers; and
4. whether or not a use is an "experimental use."

With regards to the third factor, either an agreement of confidentiality or circumstances creating a similar expectation of secrecy may negate a public use. A formal confidentiality agreement is not required to show non-public use.

With regards to the fourth factor, "**experimental use**" in the context of patent law is when an inventor is perfecting his method or system before he patents the invention. Patent law recognizes that an inventor must be given the opportunity to develop his invention through experimentation. Activities are

experimental if they are a legitimate effort to test the claimed features of an invention or to determine if the invention will work for its intended purpose. So long as the primary purpose is experimentation, it does not matter that use of the invention was accessible to the public or that the inventor incidentally derived benefit from the use, for example a normal surgical fee.

Please keep in mind that there is a difference between "experimental use" in the context of patent law and the way that the word "experiment" is used in the context of medicine. The concept of "experimenting" in medicine refers to the performance of new medical procedures, or testing a new medicine, on a patient. That is not this case, which involves an allegedly new method or an allegedly new system for performing a known procedure: spinal derotation.

Some factors you may consider in evaluating whether a use is "experimental" in the context of patent law are

1. the necessity for public testing;
2. the amount of control over the testing retained by the inventor;
3. the nature of the invention;
4. whether payment was made in exchange for the use of the invention;
5. whether there was a secrecy obligation;
6. whether records of testing were kept;
7. the degree of commercial exploitation during the testing; or
8. whether the invention reasonably requires evaluation under actual conditions of use. There is no experimental use unless claimed features or overall workability are being tested for

purposes of the filing of a patent application.

In considering whether some prior public use invalidates a patent claim, you must remember to consider each patent claim as its own invention and consider whether all the limitations of that claim were performed in the prior use.

Prior Sale

Medtronic contends that claims 4 and 5 of the '358 patent are invalid because the inventions defined in those claims were on sale in the United States more than one year before Dr. Barry filed his U.S. patent application on December 30, 2004.

A patent claim is invalid if, more than one year before the filing date of the patent, an embodiment of the claimed invention was both:

1. ready for patenting; and also
2. the subject of a commercial sale or offer for sale in the United States.

I have already defined what it means for an invention to be "ready for patenting."

A commercial "**offer for sale**" of a system or method was made if another party could make a binding contract by simply accepting the offer. An invention was subject to an "offer for sale" if the claimed invention was embodied in an item that was actually sold or offered for sale. It is not required that a sale was actually made. The essential question is whether there was an attempt to obtain a

commercial benefit from the invention beyond incidental benefit derived from the activity.

Prior Invention

Even though a patent has been issued, a patent claim is invalid if the invention defined by that claim was invented by another person in the United States before it was invented by the patentee, and that person did not abandon, suppress, or conceal the invention. Medtronic contends that the asserted claims of the '358 and '121 patents are invalid because the inventions defined in those claims were invented by another person, Dr. Lawrence Lenke, before Dr. Barry, and that Dr. Lenke did not abandon, suppress, or conceal his alleged prior invention or inventions.

In order to determine whether Dr. Lenke invented something covered by one of the claims before Dr. Barry, you must compare the date of invention for Dr. Barry's claimed invention and the date of invention for Dr. Lenke's alleged prior invention. The law requires that you make your determination based on the date of invention and not on the date the patents were issued.

The **"date of invention"** is either:

1. when the invention was reduced to practice; or
2. when the invention was conceived, provided the inventor was diligent in reducing the invention to practice.

I previously defined for you what it means for an invention to be **"reduced**

to practice."

If you find that Dr. Lenke was not the first to reduce the claimed inventions to practice, you may still find the asserted claims to be invalid if there is clear and convincing evidence that Dr. Lenke was the first to **conceive** of the claimed invention and that Dr. Lenke worked **diligently** to reduce the invention to practice over the entire time period between the date just before the date you find to be Barry's date of conception until Dr. Lenke's reduction to practice.

"Conception" is the mental part of an inventive act, i.e., the formation in the mind of the inventor of a definite and permanent idea of the complete and operative invention as it is thereafter to be applied in practice, even if the inventor did not know at the time that the invention would work. Conception of an invention is complete when the idea is so clearly defined in the inventor's mind that, if the idea were communicated to a person having ordinary skill in the field of the technology, he or she would be able to reduce the invention to practice without undue research or experimentation. This requirement does not mean that the inventor has to have a prototype built, or have actually explained her or his invention to another person. Conception may be proven when the invention is shown in its complete form by drawings, disclosure to another person, or other forms of evidence presented at trial.

"Diligence" means working continuously, though not necessarily every

day. Gaps in activity do not defeat a showing of diligence as long as there is some reasonable excuse, which may include illness, vacation, required testing, responsibilities to feed one's family, and work on closely related inventions.

If Dr. Lenke's prior invention was "**abandoned, suppressed, or concealed**," it does not make the asserted claim invalid. An invention is not abandoned, suppressed, or concealed if the invention was public, sold, or offered for sale, or otherwise used for a commercial purpose. A period of delay does not constitute abandonment, suppression, or concealment, provided that Dr. Lenke was engaged in reasonable efforts to bring the invention to market during the period. Abandonment, suppression, or concealment may be found if

1. the alleged prior inventor actively concealed the invention from the public; or
2. the alleged prior inventor unreasonably delayed in making the invention publicly known. It is not necessary that Dr. Barry had knowledge of the prior invention.

Therefore, in order for you to find one or more claims invalid under this theory, Medtronic must show by clear and convincing evidence either that:

1. before Dr. Barry invented his invention, Dr. Lenke reduced to practice a method that included all of the elements of the invention of the asserted claim you are analyzing; or
2. that Dr. Lenke was the first to conceive the invention and that he exercised reasonable diligence in later reducing the invention to practice. In addition, Medtronic must show that Dr. Lenke's method was sufficiently developed that one skilled in the art would have recognized that it would work for its intended purpose.

The law presumes that Dr. Barry conceived of the claimed invention and reduced the inventions to practice on the day the patent application was filed, in this case December 30, 2004. Dr. Barry contends that he conceived of and reduced to practice the inventions earlier. To be entitled to an earlier date of conception, Dr. Barry must prove by clear and convincing evidence his earlier dates of conception and reduction to practice, and that he worked diligently after his conception to reduce the inventions to practice.

Corroboration

Under patent law, testimony from a person claiming to have invented earlier than the filing of the patent application, by itself, cannot prove a date of invention. This is particularly true when the alleged prior inventor is an interested witness or is testifying on behalf of a party. Instead, evidence independent of the one claiming to be an inventor is required to avoid after-the-fact explanations by an inventor claiming priority. That corroborating evidence may include documents made at the time of the inventive process and testimony from other witnesses that show that the alleged prior inventor actually invented what he claims and recognized his invention at the time. Corroboration of the mere existence of a device is insufficient if that device does not show reduction to practice of the disputed invention. If evidence is presented to corroborate the inventor's testimony, you must determine whether this evidence is reliable.

Accordingly, you should consider the following factors:

1. the relationship between the corroborating witness and the inventor;

2. the time period between the alleged invention and this trial;

3. the interest of any corroborating witness in the subject matter of this lawsuit;

4. contradiction or impeachment of the witness's testimony;

5. extent and detail of the corroborating witness's testimony;

6. the witness's familiarity with the subject matter of the patented invention and the alleged prior invention;

7. the probability that a prior invention could occur considering the state of the art at the time; and

8. the impact of the invention on the industry and the commercial value of its practice.

If there is independent evidence to corroborate Dr. Lenke's or Dr. Barry's claimed dates of conception and reduction to practice, or diligence, you may consider the totality of the evidence to determine whether Medtronic has shown by clear and convincing evidence that Dr. Lenke was the first to invent.

DAMAGES

If you find that Medtronic infringed any valid claim of the '358 or the '121 patent, you must then consider what amount of damages to award Dr. Barry. By instructing you on damages, I am not suggesting which party should win this case, on any issue. If you find that Medtronic has not infringed any valid claim of

the patent, then Dr. Barry is not entitled to any damages.

The damages you award must be adequate to compensate Dr. Barry for the infringement. They are not meant to punish an infringer. Your damages award, if you reach this issue, should put Dr. Barry in approximately the same financial position that he would have been in had the infringement not occurred.

Dr. Barry has the burden to establish the amount of his damages by a preponderance of the evidence. In other words, you should award only those damages that Dr. Barry establishes that he more likely than not suffered. While Dr. Barry is not required to prove the amount of his damages with mathematical precision, he must prove them with reasonable certainty. You may not award damages that are speculative, damages that are only possible, or damages that are based on guesswork.

In this case, Dr. Barry seeks damages known as a reasonable royalty. A reasonable royalty is defined as the money amount Dr. Barry and Medtronic would have agreed upon as a fee for use of the invention at the time prior to when infringement began. But, regardless of the type of damages you may choose to award, you must be careful to ensure that award is no more or no less than the value of the patented invention.

I will give more detailed instructions regarding damages shortly. Note, however, that Dr. Barry is entitled to recover no less than a reasonable royalty for

each use of his method or system that Medtronic induces.

Damages – Date Damages Begin

If you decide that Medtronic has infringed any valid claim of the '358 patent, you must determine the starting date for calculating damages, which is the date that you find that Medtronic became aware of the '358 patent. The Patent Office issued the '358 patent on March 2, 2010, so Dr. Barry may not recover damages due to acts occurring before that date.

The date that damages begin to be calculated for infringement of claims 2, 3, and 4 of the '121 patent is the date this lawsuit was filed, which is February 18, 2014.

In this case, with regard to the alleged infringement of either patent, you are only being asked to assess the amount of damages to compensate Dr. Barry for infringement that has already occurred. You are not being asked to award damages for any future infringement and you should not consider or award any amount for future damages.

Damages – Reasonable Royalty

If you find that Dr. Barry has established infringement, Dr. Barry is entitled to at least a reasonable royalty to compensate him for that infringement. A royalty is a payment made to a patent holder in exchange for the right to use the claimed invention, or to induce others to use the claimed invention. A reasonable

royalty is the amount of royalty payment that Dr. Barry and Medtronic would have agreed to in a hypothetical negotiation taking place at a time prior to when the infringement first began. In considering this hypothetical negotiation, you should focus on what the expectations of Dr. Barry and Medtronic would have been had they entered into an agreement at that time, and had they acted reasonably in their negotiations. In determining this, you must assume that both parties believed the patent was valid and infringed and that both parties were willing to enter into an agreement. The reasonable royalty you determine must be a royalty that would have resulted from the hypothetical negotiation, and not simply a royalty either party would have preferred. Evidence of things that happened after the infringement first began can be considered in evaluating the reasonable royalty only to the extent that the evidence aids in assessing what royalty would have resulted from a hypothetical negotiation. Although evidence of the actual profits an alleged infringer made may be used to determine the anticipated profits at the time of the hypothetical negotiation, the royalty may not be limited or increased based on the actual profits the alleged infringer made.

The reasonable royalty award must be based on the value that the patented method of the '358 patent *or* the patented system of the '121 patent add to Medtronic's overall business. When the infringing products have both patented and unpatented features, measuring this value requires a determination of the

value added by the patented features. The ultimate combination of royalty base and royalty rate must reflect the value attributable to the infringing features of the product and no more.

Reasonable Royalty – Relevant Factors

In determining the reasonable royalty, you should consider all the facts known and available to the parties at the time the infringement began. No one factor is dispositive and you can and should consider the evidence that has been presented to you in this case on each of these factors. I will now go through some of the kinds of factors that you may consider in making your determination.

1. Any royalties received by Dr. Barry for the licensing of the inventions described in the '358 patent or the '121 patent, proving or tending to prove an established royalty.

2. The rates paid by Medtronic to license other patents comparable to the '358 patent or the '121 patent.

3. The nature and scope of the license, as exclusive or non-exclusive, or as restricted or non-restricted in terms of its territory or with respect to whom the accused methods or systems may be sold.

4. Dr. Barry's established policy and marketing program to maintain his right to exclude others from using the patented invention by not licensing others to use the invention, or by granting licenses under special conditions designed to preserve that exclusivity.

5. The commercial relationship between Dr. Barry and Medtronic, such as whether or not they are competitors in the same territory in the same line of business.

6. The effect of selling the accused methods or systems in promoting sales of other Medtronic products; the existing value of the invention to Dr. Barry as a generator of sales of non-patented items; and the extent of such collateral sales.

7. The duration of the '358 and/or the '121 patents and the term of the license.

8. The established profitability of the methods embodied by the '358 patent or the systems embodied by the '121 patent; its commercial success; and its current popularity.

9. The utility and advantages of the patented inventions over the old methods or devices, if any, that had been used for achieving similar results.

10. The nature of the patented inventions; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the inventions.

11. The extent to which Medtronic has made use of the inventions; and any evidence that shows the value of that use.

12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the inventions or similar inventions.

13. The portion of the profit that arises from the patented invention itself as opposed to profit arising from unpatented features, such as the manufacturing process, business risks, or significant features or improvements added by the accused infringer.

14. The opinion testimony of qualified persons with scientific, technical, or specialized knowledge.

15. The amount that a licensor and a licensee (such as Medtronic) would have agreed upon (at the time the infringement began) if both sides had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to

manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a patentee who was willing to grant a license.

16. Any other economic factor that a normally prudent business person would, under similar circumstances, take into consideration in negotiating the hypothetical license.

Use of Comparable License Agreements

In evaluating the first factor, you may consider evidence concerning the amounts that other parties have paid for rights to the '358 patent and the '121 patent, or for rights to similar technologies. A license agreement need not be perfectly comparable to a hypothetical license that would be negotiated between Dr. Barry and Medtronic in order for you to consider it. However, if you choose to rely upon evidence from any other license agreements, you must account for any differences between those licenses and the hypothetically negotiated license between Dr. Barry and Medtronic, in terms of the technologies and economic circumstances of the contracting parties, when you make your reasonable royalty determination.

Availability of Non-Infringing Substitutes

In determining a reasonable royalty, you may also consider evidence concerning the availability and cost of non-infringing alternatives to the patented invention. A non-infringing alternative must be an acceptable product that is

licensed under the patents or that does not infringe the patents.

GENERAL INSTRUCTIONS FOR DELIBERATIONS

It is your sworn duty as jurors to discuss the case with one another in an effort to reach agreement if you can do so. Each of you must decide the case for yourself, but only after full consideration of the evidence with the other members of the jury. While you are discussing the case, do not hesitate to re-examine your own opinion and change your mind if you become convinced that you are wrong. However, do not give up your honest beliefs solely because the others think differently, or merely to finish the case.

Remember that in a very real way you are the judges—judges of the facts. Your only interest is to seek the truth from the evidence in the case. Do not let bias, prejudice, or sympathy play any part in your deliberations. This case should be considered and decided by you as an action between persons of equal standing in the community, of equal worth, and holding the same or similar stations in life. A corporation is entitled to the same fair trial at your hands as a private individual and should be treated as such. The law is no respecter of persons; all persons, including corporations and other organizations, stand equal before the law, and are to be dealt with as equals in a court of justice.

When you retire to the jury room to deliberate on your verdict, you will take this charge with you, as well as exhibits that the court has admitted into evidence. When you go to the jury room, the first thing that you should do is select one of

your number as your Foreperson, who will help to guide your deliberations and will speak for you here in the courtroom. You should then begin your deliberations.

If you recess during your deliberations, follow all of the instructions that the Court has given you on your conduct during the trial. Do not discuss the case unless all jurors are present in the jury room.

After you have reached your unanimous verdict, your Foreperson must fill in your answers to the written questions and sign and date the verdict form. Do not reveal your answers until such time as you are discharged, unless otherwise directed by me. You must never disclose to anyone, not even to me, your numerical division on any question.

If you want to communicate with me at any time, please give a written message or question to the court security officer, who will bring it to me. I will then respond as promptly as possible either in writing or by having you brought into the courtroom so that I can address you orally.

The presiding juror or any other juror who observes a violation of the Court's instructions shall immediately warn the one who is violating the same and caution the juror not to do so again.

After you have reached a verdict, you are not required to talk with anyone about the case unless the court orders otherwise. You may now retire to the jury room to conduct your deliberations.

SIGNED November 11, 2016.

Ron Clark
Chief Judge
United States District Court