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By Facsimile and E-Mail

The Honorable Orrin Hatch 104 Hart Office Building Washington, DC 20510

Re.: Patent Reform Act of 2007 (S. 1145 and HR 1908)

Dear Senator Hatch:

This is a letter to provide you my views on the damages provisions of the Patent Act amendments of H.R. 1908 and S. 1145. I understand it is very late in the process. However, the changes to the law on damages are particularly ill-advised, and I urge someone to focus on those issues again, before Congress acts.

Summary

The changes to section 284 on damages primarily address the apportionment problem. The goal is to limit damages to the economic value of a particular invention. That is a perfectly sensible goal. Many features of patent law prevent damages from being limited in that way. There is much to be said in favor of addressing this one problem. However, the proposed section does not do so in a desirable way.

This section will in many cases have exactly the opposite effect to that intended. Under the section, the economic value of an invention is measured by the additional value that the invention provides compared to the value that could be captured employing prior art substitute inventions. However, the economic value of an invention is not measured by the additional profits that invention allows one to capture beyond what is available from using prior art substitutes. Technology does not stop once one invention is made. Later substitute inventions also limit the economic value of an earlier invention and must be considered if an inventor is to capture the value of his or her invention and no more. There are other problems with the approach of this proposal I describe below, particularly the notion that damages will be assessed with greater rigor if federal judges are put in charge of how damages are determined. With all due respect to federal judges, ordering them to exercise more control over how damages are measured does not assure more

sensible damage awards.

The bills also change the situation in which the court may order increased damages by an unbelievably complex change to the Patent Act. I believe that damages in patent actions are increased far more often than they should be. However, the approach of the bills fails to identify the two situations in which increased damages are appropriate. In my view, it goes too far in attempting to insulate companies from increased damages. The court should have discretion to increased damages when a company has been found to infringe and, after that company learned of the patent, it decided simply to ignore the patent or proceed to infringe even though it believed that there was a very high probability if not a virtual certainty that the patent was valid and that its activities infringed the patent. In all other situations, damages should not be increased. The bills adopt a very different approach. I will not discuss this issue in further detail in this letter.

The Measure of Damages

The bills say four things on damages. First, the bills say that, when awarding damages based on "a reasonable royalty", the "court shall conduct an analysis to ensure that a reasonable royalty under paragraph (1) is applied only to that economic value properly attributable to the patent's specific contribution over the prior art." Second, the bills require the "court" to determine the "factors" that may be considered in a "reasonable royalty analysis." Third, the bills require that the court "exclude from the analysis the economic value properly attributable to the prior art, and other features or improvements, whether or not themselves patented, that contribute economic value to the infringing product or process." Fourth, the bills say that "[u]nless the claimant shows that the patent's specific contribution over the prior art is the predominant basis for market demand for an infringing product or process, damages may not be based upon the entire market value of that infringing product or process."

First, I agree entirely with the concept that damages should in all cases and no matter how measured be limited to the economic value of the invention of the patent. The problem is how to do so. I have described how this should be done in a book. It is not done by commanding federal judges to do the right thing. A legislative command that federal judges do an "analysis" and "identify all factors relevant" does not assure that patent damages it will be measured in a desirable way. Federal judges are not appointed based on their expertise in how patent damages should be measured. Commanding the courts to do an analysis of damages does not solve the apportionment problem or any other issue on how damages should be measured. If Congress believes the law is wrong, Congress should simply define the correct legal standard, and leave it to the courts to assure that this standard is followed in a particular case. I suspect this feature of the bills is simply designed to remove juries from deciding damages. If Congress wishes to say that damages will be decided by the court, Congress should say so. If that is not what Congress is attempting to do, Congress should say nothing about whether judges or juries decide damages.

The bill commands the court to conduct an analysis to ensure that so-called reasonable

royalty damages are applied only to economic value "properly attributable to the patent's specific contribution over the prior art." Under the bill, the prior art is the inventions described in patents or printed publications and used in the events that constituted a public use or an on sale, before the patent application that led to that patent was filed.

This makes no sense. The economic value of some invention does not depend entirely on the value of prior art inventions. Economic value of an invention at any time dependents on the profits that invention makes available compared to the profits that could be achieved using the next best alternative invention, whether or not that alternative constitutes prior art and, indeed, whether or not that invention was described in patent or a printed publication, or was in public use or on sale. If there is an alternative that is available for use at the time infringing activities occurred, the fact that this alternative is not prior art as defined for purposes of determining patentability ought to be utterly irrelevant.

The economic value of an invention should be based upon the additional profits that the invention allows someone to capture by commercially using an invention or selling products incorporating an invention compared to profits that would be available by use of the next best available noninfringing substitute invention at the time of the commercial activities that constituted the infringement.² The prior art does not sensibly define the world of alternative substitute inventions. Limiting substitute inventions to those found in the prior art will in many, and perhaps even most, situations mean that patent damages will exceed the value of some invention. The bills will have precisely the opposite effect to that intended.

¹ The bills adopt a strange way of defining a legal standard. The bills command the courts to conduct an analysis to assure that a reasonable royalty is measured in a certain way. If the legal standard is that damages shall be measured by the economic value attributable to the invention of a patent, the Patent Act should say so. It is then up to the courts to assure that damages in a particular case comport with the law. Congress need not command the courts to follow the law. If Congress is changing the legal standard, Congress should say so. If Congress is not changing the legal standard, and is merely changing the role of the courts in applying the law, Congress should say so. If Congress is changing both the law and the role of the court, it should say do.

² In the context of determining compensation not less than a reasonable royalty, the award should sometimes base the award on the value of an invention to an infringer, sometimes on its value to a patent owner, and sometimes on its value when used by others. The award should be based on the value the invention has in the hands of the most efficient user. If that user is some infringer, the law would properly measure the value of an invention to that infringer only if it asks, "What are the profits available to the infringer from selling a product with the patented feature or component, and what would be the profits from selling a product with the next best non-infringing substitute feature or component available at the time to that infringer." The difference measures the value of the invention to an infringer, and may be the entire profits or only part of them.

For example, assume that on the date a patent application for an invention is filed, the invention would permit someone using it to capture additional profits of \$100 per unit given the alternative substitute inventions available for commercial use at that time. Suppose that two years later someone figures out and describes an alternative invention that has most of the advantages of the first invention and may be used at about the same cost. This alternative is not prior art. However, after that alternative becomes available, economic value of the original invention may be only \$10 per unit. For infringing activities after this alternative become available, damages should be limited to \$10 per unit. Under the bills, damages will exceed the true economic value of the invention, because this alternative may not be considered.

Second, the bills compound that error by saying that the court "shall exclude from the analysis the economic value properly attributable to the prior art." In fact, if the bill wishes the courts to proceed sensibly, the bills should command the courts to do exactly the opposite. One necessary step in determining economic value of any invention is to determine the additional profits that the invention allows someone to capture. To do so, you must do an analysis of the economic value someone could capture without using that invention and using only available complementary inventions (that may or may not be part of the prior art) and the next best available substitute invention.

For example, in order to define the value of one invention at some time, it is necessary to ask what profits would be available from, for example, selling a product that employed prior art or other available inventions at that time. Suppose that one could earn \$100 in profits selling products employing only the prior art and other inventions at some point in time. However, by employing the invention with the prior art and those other inventions, someone could capture \$150 in profits. The maximum economic value of the invention is \$50. However, one can find that out only by including in the analysis the economic value available from use of the prior art and other inventions. Again, assume further that at the time of the infringing activities, there is an alternative invention available that would permit one to capture profits of \$140. Given that alternative, economic value of the invention is only \$10. If the law commands the courts to exclude from the "analysis" consideration of the economic value available from use of complementary and substitute inventions, whether or not prior art, the law precludes the courts from doing exactly what the bills presumably want to court to do.

Third, the bills command that the courts "exclude from the analysis the economic value properly attributable to the prior art, and other features or improvements, whether or not themselves patented, that contribute economic value to the infringing product or process." This feature of the bills addresses the different problem of how one separates economic value of one particular invention from the economic value of other inventions that are used or are useful with it. This is very complicated problem. I described how to do this elsewhere, and the answer is too complex to summarize here. However, one does not identify the value of some invention and the value of complementary inventions by excluding from the "analysis" the economic value attributable to other "other features or improvements, whether or not themselves patented, that contribute economic value to the infringing product or process."

Again, proper analysis of damages may only be done by including consideration of other features and improvements that are used with or are useful with some invention, and whether or not they are patented. For example, assume an inventor makes and patents a basic invention, such as the automobile. The first version of the automobile would sell for about \$1000. The inventor then makes many improvements that enhance the value of the automobile so that it will sell for \$10,000. These improvements are not patented. An infringer then begins making and selling a version of the automobile that incorporates the basic invention and some of the same improvements, and it sells for \$5,000. The bills imply that damages should be limited to \$1000. This makes no sense. The economic value of the basic invention has been enhanced by the improvements. If there is no infringement of the basic patent, the patent owner may capture the profits available from selling the \$10,000 automobile. The patent owner would not license anyone to sell the \$5,000 version of the automobile, because that would simply reduce the profits the patent owner may earn from automobile sales. The law is clear that, when damages are measured by compensation not less than a reasonable royalty, the analysis may take into account the value the patent owner could capture, if it did not license. Unless Congress is changing that rule, and it would be folly to do so, damages will not be measured by the true economic value of inventions, if the analysis must exclude consideration of the economic value of improvements.

I could describe other examples of situations where damage awards will not accurately measure the economic value of some invention, if the economic value of complementary inventions is excluded for the analysis. There are some situations in which is impossible to separate the economic value of one invention and complementary inventions, and some situations in which it is possible to separate them. However, the correct damages award in all situations may not be determined by excluding the value of complements from the analysis.

Fourth, the bills say that "Unless the claimant shows that the patent's specific contribution over the prior art is the predominant basis for market demand for an infringing product or process, damages may not be based upon the entire market value of that infringing product or process." This provision does not appear to be limited to damages awards based not compensation not less than a reasonable royalty. It appears also to limit damages based on the patent owner's lost profits. This would be an unfortunate change, because the courts have properly addressed the apportionment issue in that context be decisions such as *Grain Processing*. Again, this provision is economically wrong, because the economic value of a patented invention is not measured by comparing products or processes incorporating that invention with the economic value of the prior art.

There are other formulations of the so-called "entire market value rule", and the bills imply they are no longer applicable. This precludes the more useful inquiry in the context of so-called reasonable royalty damages. The law properly measures the value of an invention to a patent infringer only if it asks, "What are the profits available to the infringer from selling a product with the patented feature or component, and what would

be the profits from selling a product with the next best non-infringing substitute feature or component." The difference measures the value of the invention to the infringer, and may be the entire profits or only part of them.

In addition, the economic value of some invention is not necessarily measured by the market value of an infringing product or process. If an invention may be used by a patent owner or someone else to obtain greater profits than those earned when that invention is used by an infringing company in an infringing product or process, economic value of that invention should be measured by the greater value when used by the patent owner or that other company. Patent damages should not be limited to the market value of an infringing product, as the bills imply.

Also, many inventions are valuable not because they enhance market demand for a product or process. They are valuable because they enhance market supply. The bills wrongly assume that damages should be based on the entire market value of product only when the invention enhances demand for product. There may be products for which there is enormous market demand. However, this demand is totally unsatisfied because it is impossible or too expensive to make the product. Some inventor then comes up with a cheap way to make it, and patents that way. The invention is not the predominant basis for market demand. However, the invention is responsible for the entire profits from making and selling that product, and there is no reason damages should be limited as the bills seem to do.

The bills say the patent owner has the burden of showing that damages should be based on the entire market value of the infringing product or process. The bills say nothing about the burden of proof on the apportionment problem in other contexts. Those familiar with the history of the apportionment problem know that the burden of proof on this issue has historically been a major part of problem. The Supreme Court in 1912 set down rules for who must show what on apportionment.³ The Court said that, after the patent owner proves the existence of profits attributable to the invention and demonstrates that they where impossible of approximate apportionment, the burden of separation fell on the infringer. It was that decision that, in the views of many lawyers at the time, caused damages in many cases to be awarded that greatly exceeded the value of inventions. While the district courts often ignore that decision, it is still on the books and the law until Congress or the Court changes it. If Congress is addressing this burden of proof issue in these bills, it should say so. In my view, the patent owner should have the burden of proof on all damages issues, and the Supreme Court's decision was wrong.

Fifth, the bills' command that a court identify all factors relevant to determining a reasonable royalty seems to be designed to increase the role of federal judges in deciding damages and decrease the role of juries. If "factors" means facts, the bill commands the judge to find the facts, and the jury has no role to play. If "factors" means something else, it is unclear to me what the bills command the judges to do. In 1970, a district court listed a number of factors that are pertinent to determining damages when they may not

³ Westinghouse Elec. & Mfg. Co. v. Wagner Elec. & Mfg. Co., 225 U.S. 604 (1912).

be measured by patent owner's lost profits.⁴ Since then, these "factors" have taken on unfortunate significance. The use of the terms "factors" in these bills could have the unintended consequence of limiting damage analysis to the factors defined in that decision. This would be a terribly unfortunate result.

Sixth, the bills could be understood to mean that when damages may not be measured by the patent owner's lost profits, they are measured by a "reasonable royalty." The Patent Act now says damages shall be adequate to compensate for the infringement in no event less than a reasonable royalty. The Patent Act does not say damages are measured by a reasonable royalty. This is a subtle and important distinction. The courts have become prone to view the Act as commanding that, when lost profits do not exist or may not be determined, damages be measured by a reasonable royalty, and a reasonable royalty is defined by what the patent owner and the infringer would likely have agreed to in a hypothetical negotiation. This is not what the current Act says, and not what Congress intended when it last amended the Act in 1946 to address damages. Measuring damages in this way leads to damages that are often too low. They are too low when the patent owner is more efficient than the infringer. They are also too low when some other potential licensee would be more efficient than the infringer. Congress should not preclude patent owners from measuring damages by compensation not less than a reasonable royalty, and should not inadvertently make the hypothetical negotiation test the sole way of proving damages when lost profits are not available.

Finally, the bills ignore the fact that much of the confusion in the law of apportionment resulted from the courts' decisions in the middle 1960s that Congress in 1946 changed the Patent Act to eliminate an infringer's profits as a measure of damages. Prior to the mid-1960s, most damage awards were based on an infringer's profits. There was a great deal of law (much of it quite sensible) that addressed the apportionment problem in that context. When the courts eliminated that measure of damages, the courts inadvertently cast a cloud over much of the law on apportionment. In my view, it is highly debatable whether Congress in 1946 decided to eliminate in infringer's profits as a measure damages. Many of the dilemmas created by measuring damages by compensation not less than a reasonable royalty could be overcome by restoring an infringer's profits as a measure damages. This is how damages are measured in all other intellectual property rights systems. The bills unfortunately foreclose the possibility of restoring that approach.

The views expressed in this letter were described years ago in my book on patent law and economics. John W. Schlicher, *Patent Law: Legal and Economic Principles*, West Group (1992, Second Edition 2003). A more detailed explanation may be found there.

⁴ Georgia-Pacific Corp. v. United States Plywood Corp., 318 F. Supp. 1116 (S.D.N.Y. 1970), modified, 446 F.2d 295 (2d Cir. 1971).

If I may be of any assistance in helping to correct these problems, I would be pleased to do so.

Verytruly yours,

John W. Schlicher