

2009-1374

**United States Court of Appeals
for the Federal Circuit**

TIVO INC.,

Plaintiff-Appellee,

v.

ECHOSTAR CORPORATION, ECHOSTAR DBS CORPORATION, ECHOSTAR
TECHNOLOGIES CORPORATION, ECHOSPHERE LIMITED LIABILITY COMPANY,
ECHOSTAR SATELLITE LLC, AND DISH NETWORK CORPORATION,

Defendants-Appellants.

*Appeal from the United States District Court for the Eastern District of
Texas in case no. 2:04-CV-01, Judge David Folsom.*

**BRIEF OF *AMICI CURIAE* DISTINGUISHED
ECONOMISTS ON REHEARING *EN BANC* IN SUPPORT OF THE
APPELLEE, TIVO INC. IN FAVOR OF AFFIRMANCE**

ROD A. COOPER

Counsel of Record

PROTECTING ASSETS OF THE MIND
640 Southpointe Court, Suite 220
Colorado Springs, CO 80906
(214) 564-7794

SEPTEMBER 17, 2010

TIVO v. ECHOSTAR, No. 2009-1374

CERTIFICATE OF INTEREST

Counsel for *Amici Curiae* Distinguished Economists certifies the following (use “None” if applicable; use extra sheets if necessary):

1. The full name of every party or amicus represented by me is:

Daniel F. Spulber
Northwestern University Kellogg School of Management*

Peter G. Klein
University of Missouri Department of Economics

Stephen E. Margolis
North Carolina State Department of Economics

Eric B. Rasmusen
Indiana University Department of Economics

Michael E. Sykuta
University of Missouri Department of Economics

* Representative organizational affiliations of all amici are provided for identification purposes only. Amici do not purport to speak for any organization, and the views expressed here should not be attributed to any organization. The views expressed here are the personal views of the amici.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

Not applicable

3. All parent companies and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are:

None

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court are:

Rod A. Cooper
PROTECTING ASSETS OF THE MIND
640 Southpointe Court, Suite 220
Colorado Springs, CO 80906
214.564.7794

September 17, 2010
Date



Rod A. Cooper

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INTEREST OF THE *AMICUS CURIAE*

The *amici curiae* submitting this brief are professors of economics who teach, conduct research, and publish in the area of competition and intellectual property law and economics. The principal author of the brief is Professor Spulber. None of the *amici* has any financial interest in any party to the case or in the outcome of the case. Neither party, nor any of either party's counsel, authored this brief in whole or in part. Professor Spulber has received a general grant from the International Center for Law and Economics ("ICLE") for academic writings without any restrictions as to its use. While TiVo Inc. has been a contributor to ICLE, neither TiVo nor its outside counsel authored this brief in whole or in part. This brief solely represents the views of its signatories. The professors write instead on the basis of their strong interest in the preservation of incentives to innovate. This brief is being filed by consent of the parties to this appeal, and pursuant to paragraph 6 of the Court's May 14, 2010 Order.

SUMMARY OF THE ARGUMENT

The Appellants (collectively, “EchoStar”) argue that the panel majority’s ruling will stifle innovation because fear of the “sword” of contempt will deter infringers from engaging in invention. *See* EchoStar’s Pet. for Reh’g *En Banc* at *7 (quoting *Arbek Mfg. Inc. v. Moazzam*, 55 F.3d 1567, 1570 (Fed. Cir. 1995)). In contrast, this brief of *amici curiae* shows that the much greater danger to the innovation and patent system will be caused by an infringer who is not willing to conform to the terms of a permanent injunction. In this case, contempt proceedings are appropriate, and the Federal Circuit should affirm its earlier ruling in favor of the Appellee, TiVo Inc. (“TiVo”). It should do so by using a simple, analytical approach to contempt proceedings that is based on the doctrine of equivalents (“DOE”).

A trial court’s decision to enforce an injunction by issuing a contempt judgment depends on two prior steps: a determination that some expedited procedure focusing on compliance with the injunction is more appropriate than a subsequent new jury trial on the question of patent infringement and a determination that contempt occurred. The overall process should satisfy several important objectives: (1) maintaining consistency with legal precedent, (2) fostering efficiency and due process, and (3) preserving incentives to invent, incentives to invest in and commercialize new technologies, and third-party

incentives to avoid infringement and to design around. *The combination of these objectives would be best satisfied if courts base their decisions on a DOE comparison between the newly accused device and the initial infringing device. Consistency, efficiency, fairness, and appropriate deterrence all demand that a newly accused device that is “equivalent” to the infringing device be adjudicated in a proceeding like contempt that affords both expedited process and the possibility of heightened penalties.*

ARGUMENT

The choice between contempt proceedings and new infringement proceedings for a newly accused device should satisfy several important objectives: (1) maintaining consistency with legal precedent, (2) fostering efficiency and due process, and (3) preserving incentives to invent, incentives to invest in and commercialize new technologies, and third-party incentives to avoid infringement and to design around. On the particular issue in this case, these different objectives all point in the same direction.

To address these objectives, this brief argues that the court should apply a test based on the DOE. If the initial infringing device and the newly accused device are “substantially the same” in the sense of the DOE, the court should evaluate the newly accused device through contempt proceedings. Conversely, if the initial infringing device and the newly accused device are not “substantially the

same” in the sense of the DOE, the court should evaluate the newly accused device through infringement proceedings. Whichever threshold is used, there are burdens on the patentee, the defendant, and the legal system. Thus it makes sense to look at keeping costs low for a given level of accuracy. We argue in this brief that application of the DOE is the appropriate mechanism for determining the appropriateness of a contempt proceeding to enforce an injunction against a newly-accused device, and that application of the doctrine here counsels in favor of affirming the District Court’s decision.

I. THE FIRST TWO OF THE COURT’S FOUR ISSUES FOR *EN BANC* CONSIDERATION ARE BEST ANSWERED THROUGH APPLICATION OF THE DOCTRINE OF EQUIVALENTS.

A court can enforce its judgment of patent infringement through a permanent injunction. In turn, the court can enforce permanent injunctive relief through penalties for contempt. However, what happens when there is a new complaint of infringement? The two-part legal process governing a newly accused device necessarily begins with determining the type of proceedings to be followed: contempt or new infringement. *See KSM Fastening Sys., Inc. v. H.A. Jones Co.*, 776 F.2d 1522, 1532 (Fed. Cir. 1985).

This court raises several crucial questions in this regard. This brief provides answers to the first two of these important questions: under what circumstances is it proper for a court to assess a newly-accused device through contempt

proceedings, and by what means should a newly-accused device be compared to an adjudged infringing device in such a proceeding? The main conclusion is that the court's choice between contempt proceedings and wholly new infringement proceedings should depend on its application of the DOE to compare the initial infringing device with the newly accused device.

The long-established function-way-result test was set forth by the Supreme Court for applying the DOE:

[T]he substantial equivalent of a thing, in the sense of the patent law, is the same as the thing itself; so that if two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape.

Union Paper-Bag Mach. Co. v. Murphy, 97 U.S. 120, 125 (1877). *See also KSM Fastening Sys., Inc. v. H.A. Jones Co.*, 776 F.2d 1522, 1527 (Fed. Cir. 1985); *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 608 (1950). More recently, the Supreme Court reaffirmed the ongoing relevance of the “linguistic framework” of this test, as well as the linguistic framework that focuses on whether there are “insubstantial differences.” *See Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 40 (1997). But regardless of the specific linguistic framework used, the DOE is a valuable rule because it points out how to determine similarity of *substance* (two devices do the same work in substantially the same

way, and accomplish substantially the same result) and it points out that differences in *style* can be disregarded (they differ in name, form, or shape).

The DOE is generally applied to compare a patented device with an accused infringing device. Although, as with any legal doctrine, there is some disagreement among courts about the DOE's precise application, the basic contours of the doctrine are well-known and have been employed by federal courts for more than 150 years.¹ In current practice the DOE is applied, according to the Supreme Court, in essentially the following fashion:

What constitutes equivalency must be determined against the context of the patent, the prior art, and the particular circumstances of the case. Equivalence, in the patent law, is not the prisoner of a formula and is not an absolute to be considered in a vacuum. It does not require complete identity for every purpose and in every respect. In determining equivalents, things equal to the same thing may not be equal to each other and, by the same token, things for most purposes different may sometimes be equivalents. Consideration must be given to the purpose for which an ingredient is used in a patent, the qualities it has when combined with the other ingredients, and the function which it is intended to perform. An important factor is whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was.

A finding of equivalence is a determination of fact. [...] Like any other issue of fact, final determination requires a balancing of credibility, persuasiveness and weight of evidence. It is to be decided by the trial court and that court's decision under general principles of

¹ The DOE traces its origins to *Odiorne v. Winkley*, 18 F. Cas. 581, 582 (C.C. Mass. 1814) (No. 10,432), and found its first expression in the Supreme Court in *Winans v. Denmead*, 56 U.S. 330 (1853).

appellate review, should not be disturbed unless clearly erroneous. Particularly is this so in a field where so much depends upon familiarity with specific scientific problems and principles not usually contained in the general storehouse of knowledge and experience.

Graver Tank, 339 U.S. at 609-10. *See also Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17 (1997); *Panther Pumps & Equip. Co., Inc. v. Hydrocraft, Inc.*, 566 F.2d 8, 18-19 (7th Cir. 1977) (quoting *Graver Tank*, 339 U.S. at 608-09).

As we will discuss below, the DOE's assessment of substantive differences between devices serves an important economic function. Protection of innovation and the facilitation of the commercialization of innovation require, among other things, that economic actors have an incentive to contract with existing patentees. That incentive is vitiated if subsequent actors can effectively copy the substance of a patentee's innovation. But more to the point of this case, that incentive is also vitiated if subsequent actors can impose burdensome costs and delay on an existing patentee. The DOE is a rule of process, aimed at ensuring that courts and the U.S. Patent and Trademark Office ("PTO") possess the means to preserve those incentives when presented with non-literal, but no less destructive, infringement. And just as the DOE is essential to preserving the patent system's incentives at the point of an infringement determination, it is also essential to preserving those incentives where, as here, the court is confronted with a procedural determination that could impose sufficient cost on a patentee (and confer sufficient benefit on a

potential infringer) to endanger proper enforcement of its property right.

Although “[t]he authorities are uniform that the modified device must be an infringement to find contempt of such an injunction,” *KSM*, 776 F.2d at 1532, the issue at hand in this case is how to determine whether this assessment of the modified device should be evaluated through contempt proceedings or new infringement proceedings. This issue is neither a finding of contempt nor a finding of infringement; rather, the issue is a first-stage choice between two types of proceedings, the resolution of which determines whether TiVo must be forced to begin full infringement proceedings anew on the basis of EchoStar’s supposed modification.

As we will argue, in EchoStar’s situation, a comparison of the newly accused device with the initial infringing device shows that contempt is the appropriate device for enforcing the court’s initial injunction; an injunction is necessary to uphold TiVo’s property right in its original patent. A contempt proceeding, when appropriate, is the vital means through which the enforceability of an injunction is upheld.

- A. *When enforcing an injunction that resulted from a finding of infringement at trial, it is proper for a district court to determine infringement by a newly accused device through contempt proceedings rather than through new infringement proceedings when a comparison of the newly accused device and initial infringing device satisfies the doctrine of equivalents test.*

It is appropriate for the district court to determine infringement by a newly accused device through contempt proceedings when the initial infringing device and the newly accused device satisfy the DOE test. This requires showing that “the two devices do the same work in substantially the same way, and accomplish substantially the same result,” and disregarding differences in “name, form, or shape.” This is consistent with prior decisions by the Supreme Court, the Federal Circuit, and the other circuits. *See, for example, KSM*, 776 F.2d at 1527.

It is appropriate for the patentee to bear a lower burden of proof for the threshold determination that initiates contempt proceedings as it does not, in and of itself, carry with it any penalty or determine the final outcome; it is merely procedural. As the District Court noted,

[t]he threshold question of whether contempt proceedings are appropriate is left entirely to the discretion of the trial court. It is not for one party to *prove* that such proceedings are or are not appropriate. If, and only if, the trial court determines that contempt proceedings are appropriate does the movant bear a burden of proving the second question—infringement by the modified device—by clear and convincing evidence.

Slip Op. at 13-14.

The court’s finding of substantial similarity merely gives the patentee the opportunity to establish infringement in a contempt proceeding through clear and convincing evidence. This pattern is common throughout the law. *See, for example, Brine, Inc. v. STX, LLC*, 367 F. Supp. 2d 61, 67 (D. Mass. 2005); *Michael*

Foods, Inc. v. Bartow Foods, Inc., 837 F. Supp. 403, 407 (M.D. Fla 1993).

Because of the substantial combination of burdens born by TiVo in making out its case as described in Section III, even following the contempt proceeding path a patentee still is far from obtaining ultimate patent protection.

- B. *Applying the doctrine of equivalents test best integrates the “fair ground of doubt as to the wrongfulness of the defendant’s conduct” test, the “more than colorable differences” test, and the “substantial open issues of infringement” tests in evaluating the newly accused device against the adjudged infringing device.*

The DOE test best integrates several tests used to compare the newly accused device with the adjudged infringing device. The Supreme Court has pointed out that because contempt is a severe penalty, it should not be applied if there is a “fair ground of doubt.” *See Cal. Artificial Stone Paving Co.*, 113 U.S. 609, 618 (1885). In *KSM*, this Court observed that a contempt proceeding should be applied only to the same device or devices with merely “colorable” differences. *KSM*, 776 F.2d at 1530. Both *KSM* as well as the *California Artificial Stone Paving* case suggest that contempt proceedings apply to similar devices and infringement proceedings apply to sufficiently different devices. *See id.* at 1530-31; *Cal. Artificial Stone Paving Co.*, 113 U.S. at 618. The present brief argues that the DOE test properly addresses these considerations.

The DOE is the basis of the “more than colorable differences” or “substantial open issues of infringement” tests in evaluating the newly accused

device against the adjudged infringing device, which are used to determine whether contempt proceedings or new infringement proceedings are appropriate. *KSM*, 776 F.2d at 1526. It is also the basis of “fair ground of doubt as to the wrongfulness of the defendant’s conduct” test. In *KSM*, the Federal Circuit states:

In *MAC Corp. of America v. Williams Patent Crusher & Pulverizer Co.*, 767 F.2d 882, (Fed. Cir.1985), this court affirmed the denial of proceedings in contempt where the district court found a "fair ground of doubt" that the injunction against infringement had been violated because of differences between the adjudged and accused devices. In so holding, the court followed the Supreme Court's directive in *California Artificial Stone Paving Co. v. Molitor*, 113 U.S. 609 (1885).

KSM, 776 F.2d at 1536. The “fair ground of doubt” is based on “differences between the adjudged and accused devices.” Thus application of the DOE test should resolve the issue of the “fair ground of doubt.”

The use of the DOE to determine whether a modified device is “colorably different” from an adjudged device is well-established, even though this court’s holding in *KSM* seems to call the practice into question. As the Third Circuit said in its *Interdynamics* decision, “[i]n determining whether the changes made by [a modified device are] merely colorably different and therefore a contempt, it is necessary to apply the well-established doctrine of equivalents.” *Interdynamics Inc. v. Firma Wolf*, 653 F.2d 93, 98-99 (3d Cir. 1981) (citing *Simmons Co. v. A. Brandwein & Co.*, 250 F.2d 440, 450 (7th Cir. 1957)). *KSM* calls this a “substantive” inquiry and instead endorses a “procedural” alternative, but, as this

court's questions for *en banc* review make clear, there is ambiguity in the procedural standard to be employed under *KSM*. The test proposed here unifies the two basic approaches identified in *KSM*: the assessment is *procedural*, as endorsed by *KSM*, but the determination turns, as it must, on a factual assessment to be made by the court. Where *KSM* ambiguously defines the scope of this factual determination (“substantial open issues,” “fair ground of doubt,” etc.), we propose here importing what the court identifies as a *substantive* determination into the procedural assessment.

In other words, the appropriate process should employ, as *KSM* suggests, two steps—the first procedural (determining whether to proceed in a contempt hearing) and the second substantive (determining whether the newly accused device infringes). But the court's decision in the first step should be made through application of the DOE to determine whether the adjudged and accused devices are sufficiently similar to warrant merit consideration of the infringement question under the court's jurisdiction through a contempt proceeding. As the court in *KSM* noted, “[t]he question to be answered under such standard is essentially a *procedural* one. Must substantial new issues be litigated to determine infringement?” *KSM*, 776 F.2d at 1531. This question is best answered by a comparison of the adjudged and accused devices employing the DOE, where

“equivalence” under the doctrine indicates that no substantial new issues need to be litigated.²

C. *Where a contempt proceeding is proper, the doctrine of equivalents is applied to compare the newly accused device with the patented invention. The two-stage procedure is sufficient to give weight to the infringer’s efforts to design around the patent and its reasonable and good faith belief of noninfringement by the new device, for a finding of contempt.*

The two-stage procedure involves a choice between contempt proceedings and new infringement proceedings at the first stage, and a determination of infringement at the second stage. Where a contempt proceeding is proper, the burden of proof placed on the patentee at the second stage is to show that the DOE is satisfied by the patented device and the newly accused device, thus demonstrating infringement and violation of the permanent injunctive relief. Showing that the DOE is satisfied by the patented device and the newly accused device is exactly the same test that would need to be satisfied in new infringement proceedings absent literal infringement. The two-stage procedure is sufficient in itself to give weight to the infringer’s efforts to design around the patent and to account for the infringer’s reasonable and good faith belief of non-infringement by

² Even if the patentee did not assert infringement under the DOE in the underlying litigation, or if the newly accused device raises new issues (for example, if an additional term of a claim requires construction), the district court can address these issues and other issues related to a determination of infringement under the DOE. These issues can readily be addressed in the proceeding we endorse—a proceeding to determine if it is proper to proceed on grounds of contempt or an alternative patent infringement lawsuit.

the new device. If the infringer indeed made sufficient efforts to design around the patent, ensuring substantial differences between the adjudged and the newly-accused devices, the district court would not employ contempt proceedings. Again, the contempt proceeding is proper only because the initial infringing device and the newly accused device met the DOE test. This addresses the issue of whether or not the infringer made the device sufficiently different by designing around the patent and exhibited good faith. *See KSM*, 776 F.2d at 1530. If the newly accused device is sufficiently different due to the infringer's efforts, the court would not choose contempt proceedings and there would instead be a new infringement proceeding.³ The first-stage choice between contempt proceedings and new infringement proceedings should not depend on the defendant's intent, but instead on a substantive comparison of the newly accused device and the initial infringing device.

II. IN CHOOSING BETWEEN CONTEMPT AND NEW INFRINGEMENT PROCEEDINGS, THE COURT SHOULD WEIGH THE INCREMENTAL COSTS OF A CONTEMPT PROCEEDING AGAINST THE TOTAL COST OF NEW INFRINGEMENT PROCEEDINGS.

The court should choose contempt proceedings when the incremental costs of new contempt proceedings are less than the total costs of new infringement

³ We note that even in its substantive setting (infringement) the Court has affirmed that good faith is irrelevant to the proper application of the DOE: "Application of the doctrine of equivalents, therefore, is akin to determining literal infringement, and neither requires proof of intent." *Warner-Jenkinson*, 520 U.S. at 35.

proceedings. This consideration requires a comparison of the initial infringing device with the newly accused device, with contempt proceedings being chosen when the DOE is satisfied, and new infringement proceedings chosen otherwise.

What is more, the core incentives of the patent system are maintained by applying a DOE approach that uses the originally infringing product as the benchmark. For the patent system to work well it must protect the patent owner's intellectual property rights and foster coordination in the market for inventions. This in turn requires that infringement be deterred, not rewarded. Allowing courts to enforce their injunctions through contempt proceedings when the defendant's new product is a mere equivalent of the old ensures that infringement is not rewarded.

Economic analysis offers a fundamental insight into the choice between new infringement proceedings and contempt. Consider a decision maker who must choose between two projects, only one of which may be carried out. One of the two projects is an extension of an existing project and the other is a new project that stands alone. With comparable benefits, considerations of economic efficiency dictate that the decision maker should compare the *incremental costs* of extending the current project with the *total costs* of the new project. The decision maker chooses efficiently by selecting the project extension if the incremental

costs of the project extension are less than the total costs of the new project, and choosing the new project if converse holds.

In evaluating the two projects, the only costs that matter are those triggered by the decision. This is why the decision maker need only consider incremental costs when considering an extension of the existing project. That is also why the decision maker must consider the total costs of the new project. The choice between the two projects is based on the fundamental principle of economics that decisions are made “at the margin.”

Here contempt proceedings for EchoStar’s newly-accused device are an extension of an existing project, which consists of infringement proceedings and injunctive relief proceedings for the initial infringing device. The extension of the existing project is contempt proceedings for the newly accused device. Infringement proceedings for the newly accused device are a new project. Considerations of economic efficiency dictate that a decision maker should compare the *incremental* costs of a contempt proceeding with the *total* costs of a new infringement proceeding, and choose the option with the lowest costs.

The costs of proceedings are the time, effort and transaction costs of the court and the parties involved, which are affected by the prior record and applicable rules. The benefits of proceedings reflect the ability of a court to adjudicate effectively given the rules that apply to contempt proceedings in

contrast to the rules that apply to infringement proceedings. With comparable benefits arising from the two proceedings, the efficient choice depends on their relative costs. Any difference in benefits can be expressed as cost differences so that it is appropriate to focus solely on the relative costs of the two types of proceedings.

This helps to determine the conditions under which a court should determine infringement by newly accused device through contempt proceedings or through new infringement proceedings: choose contempt proceedings when their incremental costs are less than the costs of new infringement proceedings, and choose infringement proceedings when the converse holds.

The incremental costs of contempt proceedings are affected by the rules governing contempt proceedings and the information generated by prior proceedings. As the Federal Circuit has held, “[c]ontempt proceedings are generally summary in nature and may be decided by the court on affidavits and exhibits without the formalities of a full trial.” *KSM*, 776 F.2d at 1524. In contrast, new infringement proceedings require the formalities and information gathering of a full trial, and new infringement proceedings may involve a new judge, further raising costs. Thus new infringement proceedings, rather than contempt proceedings, impose substantial risk of costly duplication of effort by the courts, the patent owner, and the accused infringer.

Contempt proceedings are always warranted if the newly infringing device clearly violates the permanent injunctive relief. For those situations in which there is some question about whether or not the permanent injunctive relief is violated, it is necessary to compare the initial infringing device with the newly accused device. When the newly accused device is not substantially different from the initial infringing device, the incremental costs of contempt proceedings are likely to be less than the costs of infringement proceedings. Conversely, when the newly accused device is substantially different from the initial device, the incremental costs of contempt proceedings may be greater than the costs of infringement proceedings. As a result, efficiency considerations imply that the court should determine infringement by the newly accused device through contempt proceedings when the initial device and the newly accused device satisfy the DOE test.

The central issue of defining differences depends on whether the newly accused device should be covered by the existing infringement and permanent injunctive relief decisions or addressed in new infringement proceedings. There is no simple technological rule that can apply across many different industries and many different scientific and technological areas. The problem is to find a consistent way to measure the differences between the two devices that apply in a

wide variety of legal contexts and technological situations. The DOE test satisfies these considerations.

The interest of the parties will differ so that the similarity or difference between the two devices is likely to be the subject of controversy. The accused infringer is likely to argue that the devices are very different, which would argue for new infringement proceedings. The patent owner is likely to argue that the devices are similar, which would argue for contempt proceedings. The Federal Circuit in *KSM* recognized that the patent owner would prefer contempt to a separate suit because “[t]he adjudged infringer is already under the jurisdiction of the court and may be summoned to appear to respond on the merits, the contempt motion being merely part of the original action.” *KSM*, 776 F.2d at 1524.

Contempt proceedings are not merely a formality; rather, as demonstrated by the District Court in this case, contempt proceedings are substantive and focused, incorporating extensive evidence and assessment by the court to determine the eventual outcome. But contempt proceedings do permit the aggrieved patentee to short-circuit some of the procedural costs of a full infringement suit, and thus permit the resolution of the question of ongoing infringement more efficiently. As discussed, the hurdle to enter into such proceedings is likewise not a formality, requiring a determination by the court that the newly accused device is substantially similar to the adjudged infringing device. But by making the gate-

keeping question turn on this determination, the court assures that proper incentives may be preserved through expedited process when an adjudged infringer presents a new device that is sufficiently likely, on its face, to likewise infringe the patentee's innovation.

III. PATENT OWNERS FACE SUBSTANTIAL BURDENS TO PROTECT THEIR DISCOVERIES – HENCE, A NEWLY ACCUSED DEVICE MUST BE “SUBSTANTIALLY DIFFERENT” TO TRIGGER ENTIRELY NEW INFRINGEMENT PROCEEDINGS.

Protection of IP rights already places significant burdens on the patent owner. In the instant case, TiVo is an inventor that ran a difficult and costly gauntlet to protect its discoveries. TiVo successfully surmounted five major hurdles, each with a complex set of tests, concluding with an unassailable determination of EchoStar's infringement.

First, TiVo obtained a patent, which means that it satisfied the formal requirements of the United States Patent and Trademark Office in filing its application and describing its invention. Among other requirements, TiVo disclosed information about its invention in its patent filing and demonstrated that its invention was novel and non-obvious. *See* 35 U.S.C. §§ 102-103.

Second, TiVo became a practicing patent owner by designing, producing, marketing and selling a product based on the patent.⁴ TiVo incurred the costs and

⁴ The importance of practice is evident in *Wald v. Mudhopper Oilfield Servs., Inc.*, No. CIV-04-1693-C, 2006 WL 2128851, at *3, *5 (W.D. Okla.).

risks associated with using and commercializing the invention, in contrast to licensing the patent for use by others. This means that TiVo chose to use its patented invention rather than to license or sell the patent to others, indicating a preference for this mode of commercialization. Patent law precedent recognizes the difference between practicing and non-practicing patent owners by making it more difficult for non-practicing patent owners to obtain the exclusion remedy. *See, e.g.,* Yixin H. Tang, *The Future of Patent Enforcement after eBay v. MercExchange*, 20 Harv. J. L. & Tech. 235, 249 (2006) (“Nevertheless, exclusion as a remedy is much harder to obtain for non-practicing patent owners, as they will be hard-pressed to prove irreparable harm. Furthermore, both the balance of hardship and the public interest factors will likely weigh against them in the new calculus.”).

Third, TiVo successfully proved infringement. Going to trial and proving infringement requires an additional burden on the patent owner in comparison with settling out of court and foregoing a legal challenge entirely. The patent owner has the burden of proof in showing that their patent has been infringed. This burden often requires conveying complex technical information to a judge and jury. *See* Kimberly A. Moore, *Judges, Juries, and Patent Cases—An Empirical Peek Inside The Black Box*, 99 Mich. L. Rev. 365 (2000).

Fourth, TiVo successfully obtained an injunction to stop the infringement by EchoStar. The Supreme Court in *eBay* emphasized that permanent injunctive relief is neither guaranteed nor excluded: “The decision to grant or deny such relief is an act of equitable discretion by the district court, reviewable on appeal for abuse of discretion.” *eBay, Inc. v. MercExchange, LLC*, 547 U.S. 388, 391 (2006). Further, “[t]hese...principles apply with equal force to disputes arising under the Patent Act.” *Id.* The Supreme Court held that:

[A] plaintiff seeking a permanent injunction must satisfy a four-factor test before a court may grant such relief. A plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.

Id. The awarding of permanent injunctive relief by the District Court post-*eBay* means that TiVo satisfied the requirements of the four-factor test.

Fifth, TiVo successfully obtained a contempt judgment to enforce the injunction. As the Court points out, in contempt proceedings “the movant bears the heavy burden of proving violation by clear and convincing evidence.” *KSM*, 776 F.2d at 1524.

The occurrence of the initial infringement and the awarding of permanent injunctive relief to enforce the initial infringement imply that a new request for relief should not be treated automatically as a *de novo* action. Although contempt

proceedings also impose a heavy cost on TiVo (as well as EchoStar), they would reduce the parties' burdens relative to a *de novo* action.

New infringement proceedings would mean that TiVo must once again devote time and effort to establish infringement *de novo*, having already gone through the first infringement proceedings. Next, the patent owner would once again be required to devote time and effort to obtain permanent injunctive relief (the four factor test) *de novo*, having already gone through the first permanent injunctive relief proceedings.

By continual introduction of newly infringing devices with minor variations, an infringer can force a patent owner to repeatedly run the gauntlet. This potentially inflicts "death by a thousand cuts" on the patent owner, creating undue burdens on the patent owner and conferring undue competitive advantage in the market place on the infringer. Accordingly, the court should hold contempt proceedings when the newly accused device and the initial infringing device satisfy the DOE test.

To protect inventors' incentives to invent, the Constitution gives Congress the power "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries[.]" U.S. CONST. art. 1, § 8, cl. 8. The Constitution highlights the unique nature of IP by this special provision and distinguishes IP

from other forms of property. Inventors are to be given an exclusive right to their discoveries, although such rights are nonetheless limited by the duration of the exclusivity. The Patent Act recognizes exclusivity: “the right to exclude others from making, using, offering for sale, or selling the invention” 35 U.S.C. §154(a)(1). The Act states that “patents shall have the attributes of personal property[.]” 35 U.S.C. § 261.

IV. THE DOCTRINE OF EQUIVALENTS TEST WOULD MAINTAIN THE PATENT SYSTEM’S GOALS OF PRESERVING INCENTIVES TO INVENT, FOSTERING INVESTMENT AND COMMERCIALIZATION, AND DETERRING INFRINGEMENT.

The patent system provides key incentives, including preserving incentives to invent, fostering patentee incentives to invest in and commercialize new technologies, and third-party incentives to avoid infringement and design around existing patents. For patents to have the attributes of personal property, they must provide the right to exclude others, which in turn requires enforcement through permanent injunctive relief. The noted economist Armen A. Alchian defines property rights as having several basic features: “exclusivity of rights to the choice of use of a resource, exclusivity of rights to the services of a resource, and rights to exchange the resource at mutually agreeable terms.” Armen A. Alchian, *Property Rights*, in *The Concise Encyclopedia of Economics*, (2d ed. 2007), <http://www.econlib.org/library/Enc/PropertyRights.html>.

The law of equity allows property rights to be enforced by permanent injunctive relief because damage awards may not be sufficient to deter patent infringement and damage awards may not be sufficient to compensate patent owners for the effects of infringement. Damage awards limit the patent owner's ability to exclusively use the resource or its services because the infringer is using the resource. Damage awards also limit the patent owner's ability to exchange the resource at mutually agreeable terms, because the infringer makes the decision whether or not to use the resource and the damage award is determined by a court rather than through a bargain between the owner of the resource and the infringer.

Legal processes should be designed to preserve inventors' incentive to invent. When there is a newly accused device, contempt proceedings place less burdens on inventors than new infringement proceedings. Placing greater burdens on inventors reduces protections for IP afforded by patents and by the courts: "to require in each instance the patentee to institute a new infringement suit diminishes the significance of the patent and the order of the court holding the patent to be valid and infringed." *KSM*, 776 F.2d at 1530 (quoting *McCullough Tool Co. v. Well Surveys, Inc.*, 395 F.2d 230, 233 (10th Cir. 1968)). This implies that the legal process for a newly accused device should begin with contempt proceedings when there is not a substantial difference between the initial infringing device and the newly accused device.

Placing undue burdens on patent owners reduces incentives for everyone to devote resources to invention and to invest in developing and commercializing new technologies by depriving them all of a right to exclude those who have not shared in those investments. Correspondingly, by making it harder to exclude others, there is a simultaneous reduction in incentives to independently invent alternative non-infringing technologies.

In addition, without the rights to exclude, the market for IP will not operate efficiently. Third parties will have significantly decreased incentives to even try to contract with patentees to strike licensing deals. These incentives to contract are key because they allow for coordination to take place among the many players in the market who have different skill sets, like venture capitalists, managers, marketers, distributors, and managers, laborers. A properly functioning market for IP is important because efficient allocation of IP helps to maintain incentives to invent.⁵

Injunctive relief enforces the patent holder's right to exclude. The injunction is not a contingent contract; that is, it was not meant to be a flexible mechanism

⁵ On the importance of IP rights and patents in market coordination, see Gary S. Becker and Kevin M. Murphy, *The Division of Labor, Coordination Costs, and Knowledge*, 107 Q. J. Econ. 1137 (Nov. 1992); James F. McDonough, *The Myth of the Patent Troll: An Alternative View of the Function of Patent Dealers in an Idea Economy*, 56 Emory L.J.189 (2006); F. Scott Kieff, *Coordination, Property, and Intellectual Property: An Unconventional Approach to Anticompetitive Effects and Downstream Access*, 56 Emory L.J. 327 (2006).

through which infringers could unilaterally implement small variations in the infringing device.⁶ The DOE test helps to deter such variations and encourage communication and negotiation between the parties.⁷

The rules for choosing between contempt proceedings and new infringement proceedings also should serve to deter infringement. Permanent injunctive relief is meant to stop the infringement, while encouraging new invention argues for not penalizing the efforts of the accused infringer to develop new devices that do not infringe. This argues for the rule presented thus far: Contempt proceedings should apply when the newly accused device and the initial infringing device satisfy the DOE test, and infringement proceedings should apply otherwise. The DOE test accomplishes the following:

1. The DOE test will provide encouragement for past infringers to engage in significant rather than marginal inventions. Past infringers will be

⁶ The courts have devised such mechanisms in other cases where there was not injunctive relief. *See, for example, z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437 (E.D. Tex. 2006) and *Finisar Corp. v. DirecTV Group, Inc.*, No. 1:05-CV-264, 2006 WL 2709206 *1 (E.D. Tex.). *See also* the discussion in Tang, *supra*.

⁷ EchoStar did not disclose to TiVo or to the court that it had modified its software and was in the process of downloading that software to its infringing devices. *See Slip Op.* at 6 (“this fact [that EchoStar downloaded its modified software into Customers' DVRs] did not become known to any court until May 2008, after the appellate process had concluded.”). EchoStar chose to deploy this work-around without asking the court whether its modified software in fact avoided infringement under the terms of the court’s injunction—a course of conduct that would presumably have avoided the court’s contempt proceeding.

deterred from minor inventions by the risk of contempt proceedings. Because contempt proceedings are less likely with major inventions, past infringers will have an incentive to engage in significant inventions.

2. The DOE test will deter infringement because it will give the potential infringer an incentive to check in advance with the district court before introducing a new device. As TiVo argued, when EchoStar introduced “a purported work-around without advance evaluation by the district court, it assumed the risk that the court would ultimately conclude, as it properly did, that the asserted changes were insubstantial and the DVRs continue to infringe.” Br. of Pl., 2-3.

3. The DOE test will provide past infringers with an incentive to negotiate with patent holders to avoid contempt proceedings. This will deter future infringement and foster greater market coordination, reducing resorts to the legal system to adjudicate infringement. It deters infringers from turning patent owners into involuntary licensors.

4. The DOE test will help to deter repeated infringement. Applying contempt rather than new infringement proceedings when there are not substantial differences is consistent with the intent of the four-factor test for injunctive relief. First, the four-factor test requires that the patent holder has suffered an irreparable injury. The infringer should not be allowed to continue the injury or make it worse through repeated infringement. Second, the four-factor test requires injunctive

relief because remedies available at law, such as monetary damages, are inadequate to compensate for that injury. This suggests that repeated marginal adjustments in the infringement should be stopped. Third, the four-factor test already has considered that to balance of hardships between the plaintiff and defendant, a remedy in equity is warranted. This argues for contempt proceedings for new infringements when there is not a substantial difference between the devices. Fourth, the four-factor test has already found that the public interest would not be disserved by a permanent injunction, suggesting that contempt proceedings are warranted when there are not substantial differences between the initial and the newly accused device.

CONCLUSION

The Federal Circuit should affirm the District Court's finding of contempt in favor of TiVo. Additionally, the District Courts should be instructed to apply the DOE to (1) determine whether a new infringement accusation should be evaluated through contempt or new infringement proceedings and (2) to compare the initial infringing device with the newly accused device. If the initial infringing device and the newly accused device are "substantially the same" according to the DOE, the court should choose contempt proceedings. Conversely, if the initial infringing device and the newly accused device are not "substantially the same" the court should choose infringement proceedings. This approach is consistent with legal

precedent, maintains due process and the efficiency and equity of the legal process, and preserves incentives to invent and to commercialize inventions while helping to deter infringement.

Respectfully submitted,



Rod A. Cooper
PROTECTING ASSETS OF THE MIND
640 Southpointe Court. Suite 220
Colorado Springs, CO 80906
214.564.7794

Counsel for Amici Curiae

September 17, 2010

**United States Court of Appeals
for the Federal Circuit**

TIVO v. ECHOSTAR, 2009-1374

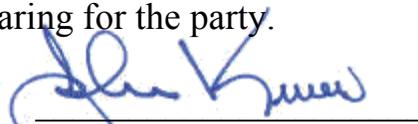
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September 17, 2010



John C. Kruesi, Jr.

**United States Court of Appeals
for the Federal Circuit**

TIVO v. ECHOSTAR, 2009-1374

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E. Joshua Rosenkranz
Orrick, Herrington & Sutcliffe LLP
51 West 52nd Street
New York, NY 10019
212-506-5380
Attorney for Appellants

Morgan Chu
Irell & Manella LLP
1800 Avenue of the Starts
Suite 900
Los Angeles, CA 90067-4276
310-277-1010
Attorney for Appellants

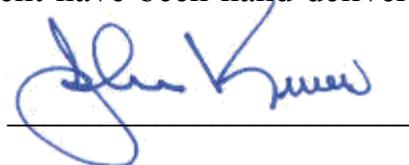
Seth P. Waxman
Wilmer Hale
1875 Pennsylvania Avenue, N.W.
Washington, DC 20006
202-663-6000
Attorney for Appellee

Donald R. Dunner
Finnegan Henderson, Farabow,
Garrett & Dunner, L.L.P.
901 New York Avenue, N.W.
Washington, DC 20001-4413
202-408-4000
Attorney for Appellee

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