

The 2011 Midwest Intellectual Property Institute
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(1:15-2:15 p.m.)

The Role of Consumer Surveys in Proving Patent Infringement Damages

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“Determining a fair and reasonable royalty is often . . . a difficult chore, seeming often to involve more the talents of a conjurer than those of a judge.”

ResQNet.com v. Lansa, 594 F.3d 860 (Fed. Cir. 2010)

Road Map

- **The Evolving Law Regarding Patent Damages**
- **Types of Survey Analyses Applicable to Patent Damages**
- **Presenting Consumer Survey Evidence at Trial**
- **Avoiding Common Challenges to Consumer Surveys**

Federal Circuit Scrutiny

The Federal Circuit has increased its scrutiny of damage awards in patent infringement cases.

- Damage awards in patent infringement cases must be supported by **sound economic theory** and tied to the patented invention's **“footprint in the marketplace.”**

Uniloc USA, Inc. v. Microsoft Corp.,
632 F.3d 1292, 1317 (Fed. Cir. 2011).

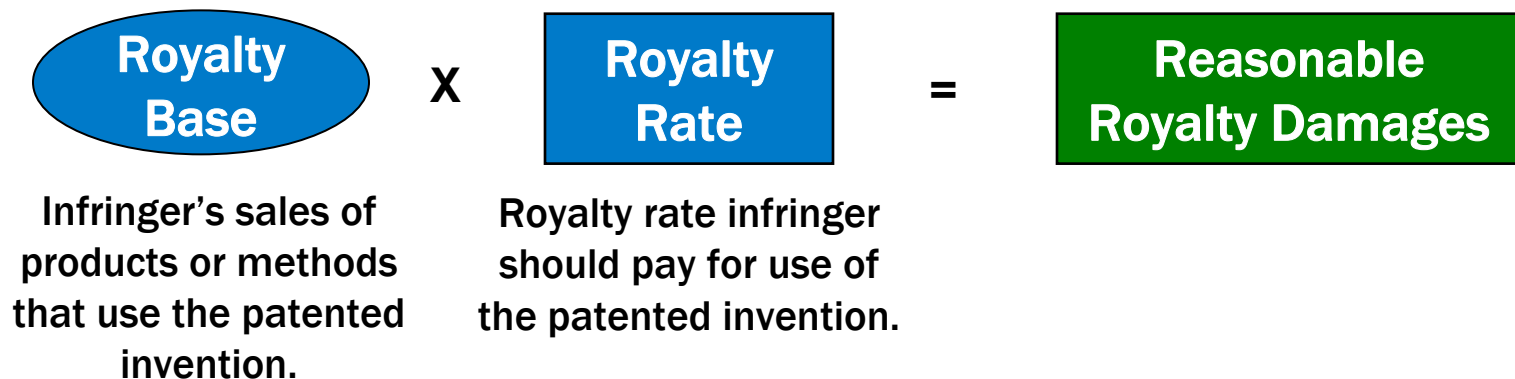
- Damage awards have been rejected if based on “speculative and unreliable evidence **divorced from proof of economic harm** linked to the claimed invention.”

ResQNet.com v. Lansa,
594 F.3d 860 (Fed. Cir. 2010).

Federal Circuit Scrutiny

Key Concepts

- The Federal Circuit requires that both the royalty base and royalty rate be targeted to compensation for **economic harm** caused by infringement of the patented invention.
- **Royalty base:** the revenue pool implicated by infringement.
- **Royalty rate:** the percentage of the revenue pool to which the patent holder is entitled.



The Role of Consumer Surveys at Trial

Consumer surveys can be used at trial to support the reasonable royalty damages analysis, including:

- **Determining the Royalty Base.**
- **Applying the Entire Market Value Rule.**
- **Determining a Reasonable Royalty Rate.**



Royalty
Base



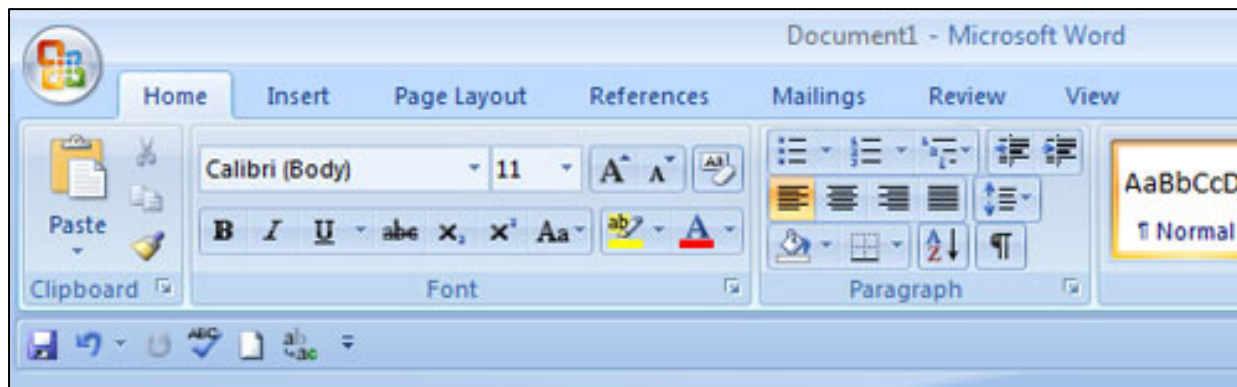
Royalty
Rate

Consumer surveys can help define an appropriate reasonable royalty base.

- ***14i Limited Partnership v. Microsoft Corp.***

598 F.3d 831 (Fed. Cir. 2010)

- Affirmed \$240 million damage award and rejected Microsoft's challenge to admission of survey evidence.
- Patent holder claimed Microsoft Word infringed patent on XML custom formatting; parties vigorously disputed extent of actual use by consumers.



Text manipulation in Microsoft Word.

Consumer surveys can help define an appropriate reasonable royalty base.

- ***14i Limited Partnership, cont'd.***
 - Survey evidence presented at trial demonstrated the patented feature was used by approximately 2% of all businesses owning Microsoft Word.
 - Damages expert applied this percentage of allegedly infringing use to overall sales of Word to determine the royalty base.
 - The jury's \$240 million damage award reflected this base.
 - “While the data was certainly imperfect, and more (or different) data might have resulted in a ‘better’ or more ‘accurate’ estimate in the absolute sense, it is not the district court’s role under Daubert to evaluate the correctness of facts underlying an expert’s testimony.”

Consumer surveys can demonstrate whether an appropriate royalty base includes revenue derived through the sale of an entire accused product.

- ***Uniloc USA, Inc. v. Microsoft Corp.***
632 F.3d 1292 (Fed. Cir. 2011)
 - “[T]he entire market value rule allows a patentee to assess damages based on the entire market value of the accused product only where the patented feature creates the ‘basis for consumer demand’ or ‘substantially creates the value of the component parts.’”

- ***Cornell University v. Hewlett-Packard Co.***

609 F.Supp.2d 279 (N.D.N.Y. Mar. 2009) (Federal Circuit Judge Rader sitting by designation in district court)

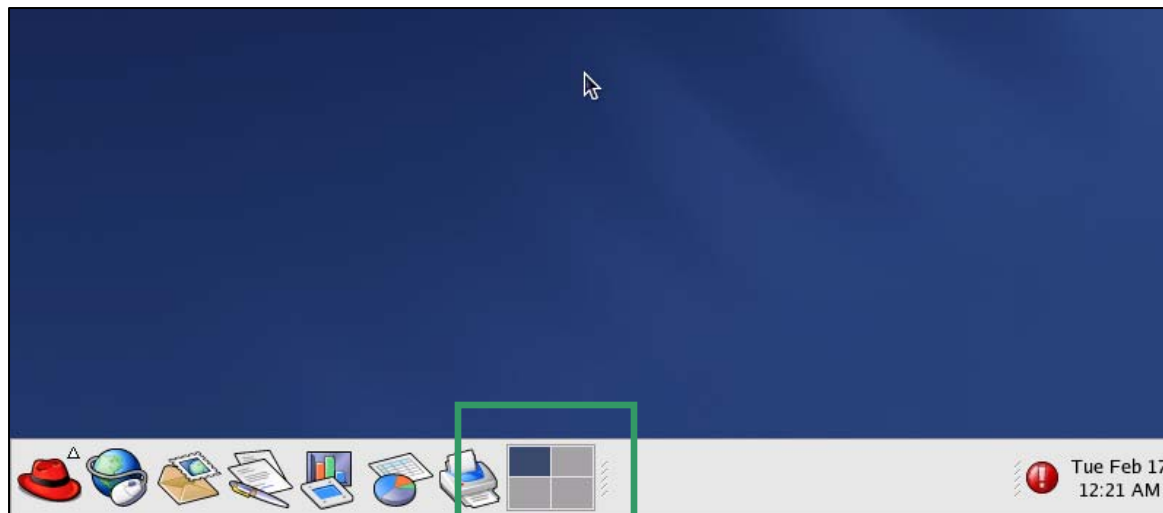
- Patent holder alleged Hewlett-Packard had included an infringing component within a processor that was incorporated into the building blocks of Hewlett-Packard’s computer workstation.
- Judge Rader rejected the patent holder’s reasonable royalty claim and slashed jury’s \$186 million damage award.
- The patent holder failed to present “**real-world evidence**” of consumer demand for the patented component.
- Judge Rader noted that a patent holder may collect royalties on some part of a system encompassing more than the claimed invention “where defendant’s real world earnings derive from real world systems sales **generated by demand for the claimed invention.**”

... But not all evidence of consumer attitudes is created equal.

- ***IP Innovation v. Red Hat***

705 F.Supp.2d 687 (E.D. Tex. Mar. 2010) (Federal Circuit Judge Rader sitting by designation in district court)

- Excluded testimony by patent holder's damages expert regarding whether claimed invention (computer desktop switching features) served as basis for consumer demand for Linux OS.



Desktop switching feature
Red Hat Linux 9

- ***IP Innovation v. Red Hat, cont'd.***
 - Expert relied on statements collected from on-line user forum for a third-party product.
 - Judge Rader rejected this evidence, noting that the claimed invention was a relatively small component of the accused OS and the feature represented only one of “over a thousand” components.
 - Consumer statements lacked “a relationship to the actual claimed technology.”
 - Judge Rader stressed that proper evidence of consumer demand must demonstrate “some plausible economic connection” between the patented feature and consumer demand.

- ***Schindler Elevator Corp. v. Otis Elevator Co.***

No. 1-06-cv-05377 (S.D.N.Y. June 23, 2011)

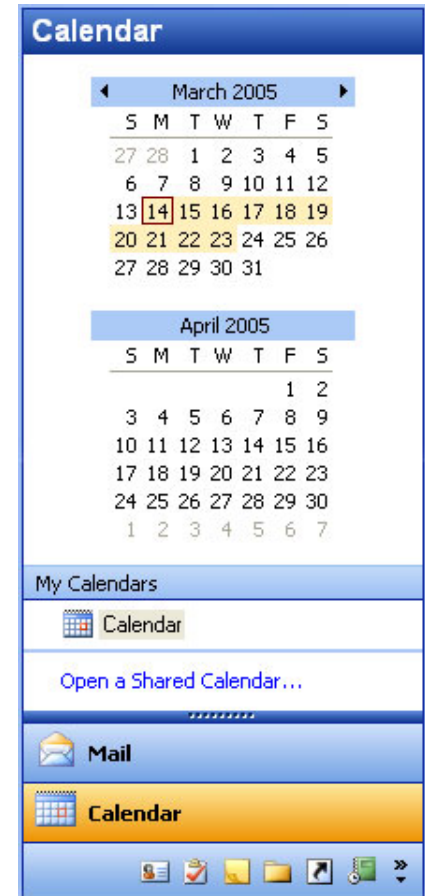
- District court excluded patent holder's damages claim based on EMVR.
- Patent holder failed to provide a sound economic connection between demand for the accused system and the specific patented feature.
- Damages expert sought to rely upon statements from consumers who had purchased accused elevator system (that included patented "seamless entry" feature).
- District court excluded expert's testimony. Although the customer statements demonstrated the patented feature was desirable, they did not establish that the entire system's value substantially derived from that single feature.
- "None of the evidence provided to the Court includes any sort of statistical or regression analysis. **None of it consists of consumer surveys or even interviews asking customers why they selected the patent holder to provide their elevator installations.**"

Consumer surveys can provide highly persuasive evidence supporting determination of a reasonable royalty rate.

- Consumer survey evidence can support reasonable royalty rate analysis under the *Georgia-Pacific factors*:
 - Effect of selling the patented specialty in promoting the sale of other products of the licensee; the existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales. (factor 6)
 - Established profitability of the products made under the patent, its commercial success and its current popularity. (factor 8)
 - The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefit of those who have used the invention. (factor 10)
 - The extent to which the infringer has made use of the invention and the value of such use. (factor 11)
 - The portion of realizable profit attributable to the invention as distinguished from non-patented elements, significant features/improvements added by the infringer; manufacturing process/business risks. (factor 13)

For example, consumer surveys can provide quantitative input into an assessment of the “value” obtained through use of a patented invention.

- ***Lucent Technologies v. Gateway***
580 F.3d 1301 (Fed. Cir. 2009)
 - Reversed \$358 million damage award.
 - Use of EMVR was inappropriate without evidence showing patented date-picker feature was basis of consumer demand for accused computer products.
 - Record lacked any evidence of usage (how often Microsoft Outlook consumers used patented date-picker feature).
 - “Usage (or similar) data may provide information that the parties would frequently have estimated during the negotiation. . . . Such data might, depending on the case, come from sales projections based on past sales, **consumer surveys**, focus group testing, and other sources.”



As with the royalty base, survey evidence offered in the reasonable royalty rate analysis must still be tied to the patented technology.

- ***Fractus, S.A. v. Samsung Electronics***

No. 6:09-cv-203 (E.D. Tex. Apr. 29, 2011)

- District court excluded evidence of a consumer survey intended to demonstrate value to consumers of internal antennas in cell phones vs. external antennas.
- Survey demonstrated that internal cell phone antenna contributed “between \$16.02 and \$29.96 to the value of a cell phone” and “over 90% of respondents prefer an internal cell phone antenna versus an external antenna.”
- This survey evidence was not tied to the alleged advantages of the patented technology (smaller antenna size and multiband functionality).
- Accordingly, the survey did not measure how consumers value the purported advantages of the patent holder’s technology.

Key Take Aways

- **Federal Circuit trend: damages awards must be supported by evidence that is firmly rooted in sound economic theory and tied to the patented invention's "footprint in the marketplace."**
- **Consumer surveys can be used to demonstrate or refute the evidentiary link between the patented invention and consumer demand.**
- **Consumer surveys must be tied to the patented technology at issue.**

Types of Survey Analyses

Different consumer survey models are available in assessing damages in patent cases, depending on the specific issues involved:

- **Choice Modeling**
- **Conjoint Analysis**
- **Direct Queries**

Types of Survey Analyses: Choice Modeling

- **Choice modeling** presents respondents with one or more groups of products to choose.
- Each group has different features, often including the specific patented feature and an overall product price.
- This survey methodology allows a relative comparison of consumer preferences for various product features and combinations.

If you were in the market to purchase a PC today, and if these were your only alternatives, which would you choose?

<p>Dell 4 GHz processor 3 GB RAM 21-inch display \$1,099</p> <input type="radio"/>	<p>HP 3 GHz processor 2 GB RAM 19-inch display \$899</p> <input type="radio"/>	<p>Sony 2 GHz processor 1 GB RAM 17-inch display \$699</p> <input type="radio"/>	<p>None: If these were my only choices, I'd defer my purchase.</p> <input type="radio"/>
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Types of Survey Analyses: Choice Modeling

Thinking about the computer you are planning to purchase for \$950, which option would you most likely select?

Option	A	B
Hard Drive Size	40	20
Option	Quick or Quiet Feature	Fast and Noisy
Price	\$37	\$0

Please select an answer.

- Option A
- Option B
- Don't know



**Appendix A, Survey Expert Report filed in
Convolve v. Dell, Inc. (E.D. Tex. 2011).**

Types of Survey Analyses: Conjoint Analysis

- **Conjoint analysis** is similar to choice modeling in that it presents respondents with one or more groups of products to choose, some including the patented feature.
- Conjoint analysis does not always force respondents to make choices, rather, respondents can be asked to rank products within a group:

2. The Conjoint

If these widgets were identical in all other ways, which would you prefer?

Temperature 125 C Price \$400,000 Telemetry rate 250 mbs Battery life 48 hours	or	Temperature 85 C Price \$200,000 Telemetry rate 100 mbs Battery life 20 hours
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Strongly Prefer Left — Somewhat Prefer Left — Indifferent — Somewhat Prefer Right — Strongly Prefer Right

Types of Survey Analyses: Conjoint Analysis

- **Depending on the structure of the survey, standard conjoint analysis can present survey respondents with greater flexibility in product choice.**
- **Conjoint analysis surveys may not differentiate between product features if participants rely on simplification strategies not related to the actual patented technology.**

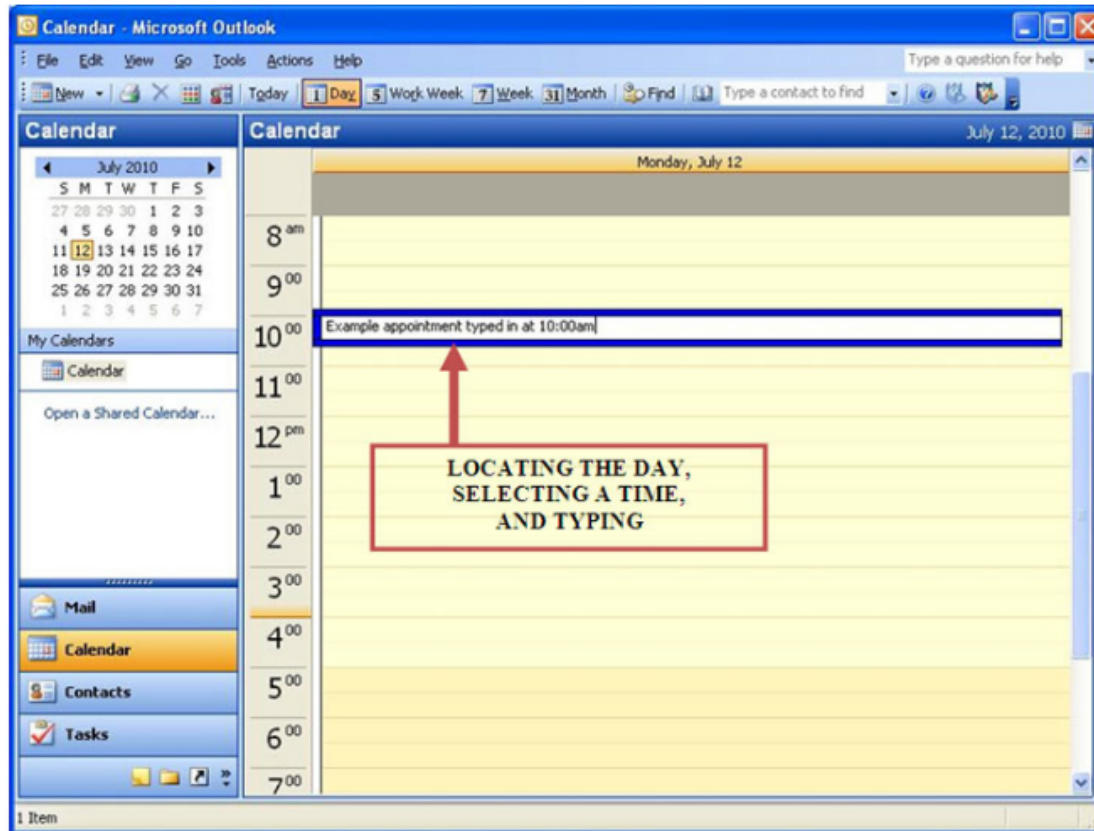
Types of Survey Analyses: Direct Queries

- **Direct Queries** can also be use to query the extent to which there is demand for a patented feature and the relative strength of any such demand.
 - Include: Multiple choices, yes/no questions, “unaided” questions, range of choices, rankings.
- Must be carefully crafted to avoid potential bias.
- ***Lucent Technologies v. Microsoft Corp.***
No. 3:07-cv-2000 (S.D. Cal. Jul. 27, 2010).
 - Survey directed at assessing consumer usage of drop-down calendar feature in Microsoft Outlook.
 - Survey questions asked highly targeted questions of respondents, but in many cases did not force respondents to make a choice between features or rank usage against other features included in Outlook.
 - Microsoft criticized survey, arguing that questions were leading and failed to allow respondents a full range of potential responses.
 - District court has yet to address these objections to methodology.

Types of Survey Analyses: Direct Queries

When using the calendar feature in Microsoft Outlook...

It is also possible to enter the time of an appointment by using other methods, such as by locating the day, selecting a time, and typing (as shown in the screenshot below).



Next

Types of Survey Analyses: Direct Queries

- **Multiple choices:**

When you have entered the date of an appointment using the calendar feature in Microsoft Outlook, how have you done this?

Have you entered the date of an appointment by...

Select all answers that apply

- Typing the date in the date box
- Using the drop-down calendar to point and click on the date
- Using another method
- Don't know/No opinion

Next

Types of Survey Analyses: Direct Queries

- **Yes/No choices:**

Now, assume Microsoft Outlook did not have the capability of entering the date of an appointment by using the drop-down calendar.

If Microsoft Outlook did not have this capability, do you think...

Select one answer only

- You would have bought Microsoft Outlook
- You would not have bought Microsoft Outlook
- Don't know/No opinion

Next

Types of Survey Analyses: Direct Queries

- Range of choices:

Assume that it cost approximately \$109 to purchase Microsoft Outlook.

About how much extra would you have been willing to pay for Microsoft Outlook to include the capability of entering the date of an appointment by using the drop-down calendar?

Select one answer only

- Less than \$1
- \$1
- \$2
- \$3
- \$4
- \$5
- \$6
- \$7
- \$8
- \$9
- \$10
- More than \$10
- Don't know/No opinion

Next

Types of Survey Analyses: Direct Queries

- “Unaided” questions:

WIRELESS SERVICES

In this section of the questionnaire, we are interested in the reasons behind your decision for choosing a wireless service provider and/or unlimited data plan. Again, there are no right or wrong answers, we are only interested in your thoughts and how you were making your decision.

A1. Which services and features do you currently use/are you considering using on your cell phone?
Please specify here.

Two Probes:

Are there any other services and features you are interested in/currently use?

Can you think of any additional services and features that you use or are considering using?

Types of Survey Analyses: Direct Queries

- “Unaided” questions:

A3. Please list all of the services and features you know _____ offers for your cell phone, including those you are currently not using.

Two Probes:
Are there any other services and features offered by _____ you have heard of?
Can you think of any additional services and features by _____

A4. Why [**INSERT BASED ON S7**: did you subscribe/are you considering subscribing] to an unlimited data package or data plan? Please specify your reasons here.

Two Probes:
Are there any other reasons why you subscribed/consider subscribing?
Can you think of any other reasons?

A5. What services and features are included in the unlimited data package or data plan you [**INSERT BASED ON S7**: subscribe to/are considering subscribing to]? Please list your services and features here.

Two Probes:
Are there any other services and features included in the unlimited data package?
Can you think of any additional services and features included?

In-House Issues: Non-Litigation Surveys

Surveys conducted for litigation purposes are often very different than those conducted by a company for non-litigation marketing purposes.

- **Marketing surveys generated during the normal course of business can assess:**
 - Consumer attitudes toward existing or potential products.
 - Perceived consumer need for products and/or product functionalities.
 - Success and demand for competing products.
- **Internal marketing surveys are not always designed with litigation in mind.**

In-House Issues: Non-Litigation Surveys

In-house surveys conducted outside the scope of litigation can have substantial impact at trial.

- ***Personal Audio, LLC. v. Apple, Inc.***

9:09-cv-111 (E.D. Tex. Jul. 8, 2011)

- The patent holder alleged Apple infringing patented technology relating to music playlist functionality.
- Apple had conducted numerous internal marketing surveys directed at assessing how consumers use their iPods.
- Patent holder gained access to Apple’s surveys via discovery requests.
- Patent holder’s damages expert utilized survey responses showing how consumers access their music and how they utilize playlist functionality in supporting analysis under the *Georgia-Pacific* factors, *i.e.*, showing “value” to Apple obtained through use of patented technology.

In-House Issues: Non-Litigation Surveys

In-house counsel can play an important role in limiting the impact of challenges to consumer surveys.

- **Encourage surveys that can survive judicial scrutiny.**
 - Advocate for use of sound survey methodologies.
 - Where appropriate, utilize survey firms with patent litigation experience.
- **Be aware of survey question wording and scope.**
 - Survey questions that may appear innocuous at the time can have significant implications at trial.
 - Damages experts may use internal marketing surveys as evidence, either to support or refute opinions as to a reasonable royalty.
- **Be involved in the organizational and legal aspects of the survey, but avoid direct involvement with the interviews, results tabulation, and analysis.**

Presenting Consumer Survey Evidence at Trial

Technical challenges generally go to the weight, not the admissibility of survey evidence.

- **The general admissibility of consumer survey evidence is well established.**
- **“[W]hile technical deficiencies can reduce a survey’s weight, they will not prevent the survey from being admitted into evidence.”**

PBM Products v. Mead Johnson & Co., 639 F.3d 111 (4th Cir. 2011)

- **“[I]ssues of methodology, survey design, reliability, critique of conclusions and the like go to the weight of the survey rather than its admissibility.”**

Clicks Billiards v. Sixshooters, 251 F.3d 1252 (9th Cir. 2001).

Presenting Consumer Survey Evidence at Trial

Presentation by a qualified survey expert.

- The survey expert should be well-equipped to testify as to the design of the survey instrument, implementation of the survey, and analysis of the survey data.
- Consumer survey evidence is often used at trial to support or refute opinions regarding damages.
 - Trial courts may choose to exclude direct testimony by the survey expert if the damages expert will be relying on survey data.
- The party's damages expert is often in the position of presenting evidence about the consumer survey, and, in describing the underlying methodology used in the survey.

Presenting Consumer Survey Evidence at Trial

Counsel should ensure that damages expert is familiar with details necessary to ensure the validity and reliability of the survey data.

- ***The Braun Corp. v. Vantage Mobility Int'l***

No. 2:06-cv-50 (N.D. Ind. Jun. 21, 2010)

- Defendant's damages expert relied on a histogram that was derived from a consumer survey.
- District court struck portions of testimony by defendant's damages expert relating to the histogram.
 - The damages expert's report failed to disclose details of the underlying survey.
 - The expert did not independently establish the validity and reliability of the underlying survey data.

Presenting Consumer Survey Evidence at Trial

Proponents of survey evidence should carefully consider how such evidence might be used against the proffering party.

- ***Lear Automotive v. Johnson Controls***

No. 04-73461 (E.D. Mich. Feb. 7, 2011)

- Defendant provided its damages expert with a survey directed to assess the frequency of use of patented feature in accused garage door systems.
- Defendant’s damages expert relied on the survey to arrive at a “modest” royalty rate for the patented feature.
- The patent holder used the same survey to meet its burden of proof on direct infringement.
- Defendant left in awkward position of arguing that the survey data was inadmissible hearsay and not sufficiently reliable to support the patent holder’s infringement claims.
- District court found the data admissible as an adoptive admission.

Avoiding Common Challenges to Consumer Surveys

- **Properly-constructed consumer surveys can provide highly persuasive evidence in patent cases.**
- **Serious flaws in survey design and implementation can lead to exclusion of survey evidence.**
- **Surveys conducted for litigation purposes often are very different than those conducted by a company for non-litigation marketing purposes.**

Avoiding Common Challenges to Consumer Surveys

- **Clearly Define the Survey Objectives.**
 - When commissioning a survey, carefully define survey objectives and tailor questions to squarely address those objectives.
- **Direct the Survey to the Patented Technology.**
 - Consumer survey evidence is frequently challenged on ground that it does not specifically address the issues in dispute.
 - ***Fractus, S.A. v. Samsung Electronics* (E.D. Tex. Apr. 29, 2011)**
 - District court excluded testimony re: survey of internal vs. external antennas, because survey was not directed at specific features of claimed technology.
 - Patent-in-suit did not address internal antennas, but rather multi-band functionality and reduced size
 - ***LaserDynamics v. Quanta Computer* (E.D. Tex. Jan. 7, 2011)**
 - District court excluded expert testimony re: survey of royalty rates in computer component industry, because survey was not limited to comparable technologies.

Avoiding Common Challenges to Consumer Surveys

- **Properly Define the Survey Population.**
 - Ensure that survey participants are selected from a population encompassing the correct survey participants.
 - Example: if the goal of the survey is to determine business attitudes regarding an accused product . . .
 - Survey is *over inclusive* if it includes non-business purchasers
 - Survey is likely *under inclusive* if it fails to include certain types of business purchasers.
 - Case examples
 - ***Hodgdon Powder Co. v. Alliant Techsystems*** (D. Kan. 2007)
 - Survey population consisting only of plaintiff's customers was too narrow and should have included purchasers of competing products across the industry.
 - ***Leelanau Wine Cellars v. Black & Red*** (S.D. Ind. 2003)
 - Survey conducted by plaintiff in shopping malls was overbroad. Although plaintiff sold products through variety of channels, defendant only sold product through specific, narrow trade channel. District court

Avoiding Common Challenges to Consumer Surveys

- **Utilize Procedures to Ensure a Fair Sample of the Population.**
 - Consumer surveys often utilize some type of sampling.
 - Ensure that the chosen sample accurately reflects a cross section of the total population.
- **Determine an Appropriate Mode of Data Collection for the Survey.**
 - In-person interviews
 - Telephone surveys
 - Mail surveys
 - Internet surveys
- **Use Clear, Precise, and Unbiased Questions.**

Avoiding Common Challenges to Consumer Surveys

- **Employ Appropriate Controls to Ensure the Objectivity of the Survey.**
 - Attorneys should avoid direct participation in interview and results tabulation process.
 - Courts may exclude survey data where attorneys have undue influence.
 - *United States v. Southern Indiana Gas & Electric Co.*
258 F.Supp.2d. 884 (S.D. Ind. 2003)
 - District court “troubled” that defense counsel sent letter that “could be interpreted as pressure or guidance” to survey participants before receiving the survey.
- **Conduct a Post-Survey Validation of Data.**
- **Employ Procedures to Ensure that Survey Methodology and Data are Properly Recorded.**

Q & A

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