

Morgan Lewis

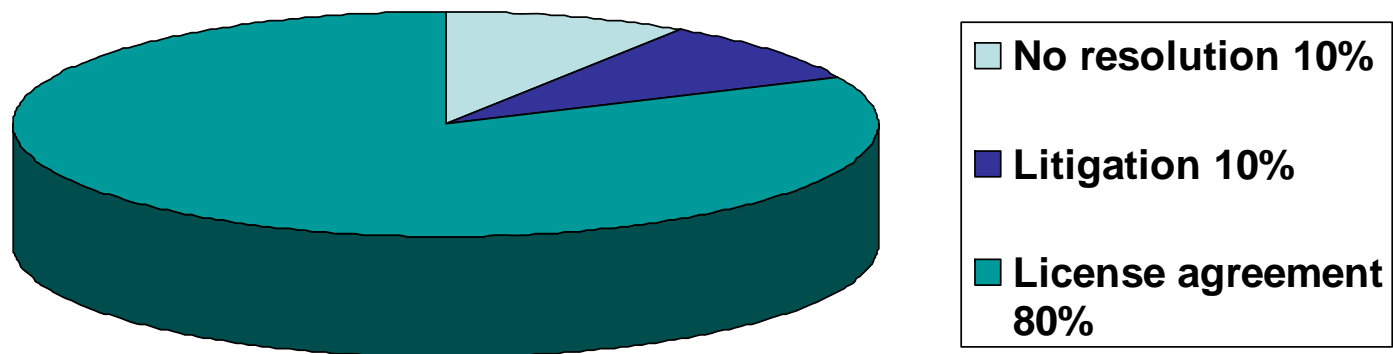
seminar

## ***Assessing Patent Infringement Damages***

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# Introduction

## *Resolution of Patent Assertions*



\*Percentages based on experience in over 200 patent-related negotiations

# Introduction

- Many successful companies follow specific investigation protocols when they receive a patent warning letter or infringement claim
  - Risk assessment
  - Strategic value of product
  - Design around possibility
  - Cross license potential

# Introduction

- Risk assessment basics
  - Is the patent valid?
  - Is the patent infringed?
  - Are there other defenses?
- Many times an assessment of potential damages is overlooked
- Knowledge of potential damages is part of the answer: Will we win? Should we settle? How much?



# Introduction

- Factors for damages assessment
  - Sales volume past and future
    - Known by your business group
  - Royalty rate
    - Lost Profits
    - Reasonable Royalty
  - Royalty base
    - System product
    - Component
    - “Entire Market Value Rule” used by courts to determine how damages should be apportioned among patented and non-patented components of an overall product or system.



# Patent Valuation – Litigation

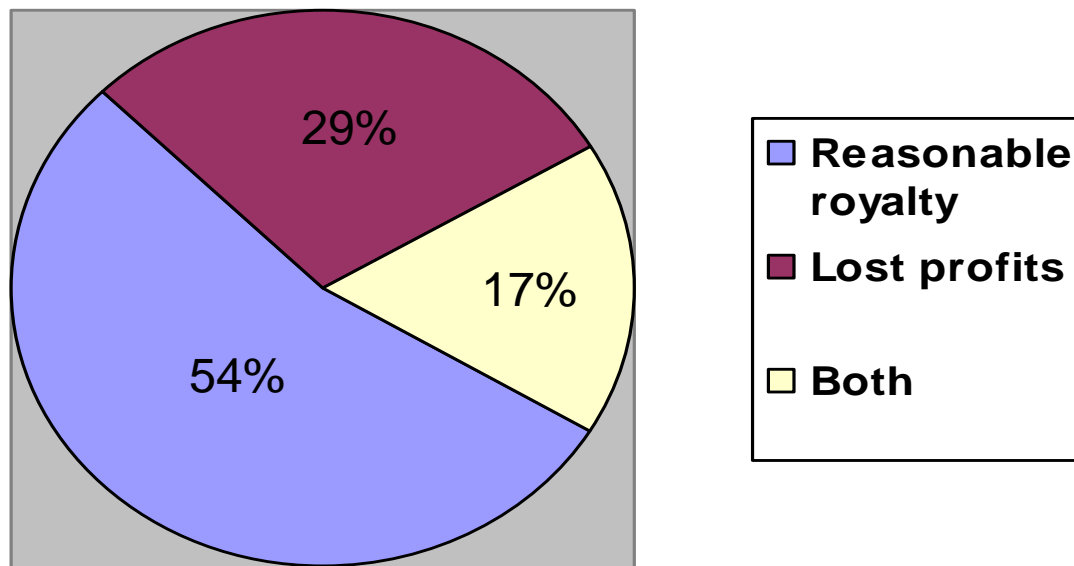
- If no risk of injunctive relief under *eBay* then damage assessment may be key factor in determining a response to a patent assertion



# Background on Damage Recovery: Lost Profits and Reasonable Royalty

- Compensatory damages for patent infringement are generally determined using:
  - lost profits due to the infringer's infringing use or sale,
  - a reasonable royalty corresponding to what is assumed the parties would have agreed to during a hypothetical negotiation at a time when the infringement began, or
  - a combination of both

# Types of Royalties Awarded 1990-2003



Source: William O. Kerr and Gauri PrakeshCanjels.  
*Les Nouvelles*, Journal of Licensing Executive Society  
June 2003

# Lost Profits

- To recover damages on a theory of lost profits, the patentee must show a reasonable probability that “but for” the infringement, it would have made the sales that were made by the infringer
- “But for” causation is often evaluated using the four-factor *Panduit* test, which requires that the patentee establish:
  - (1) demand for the patented product;
  - (2) absence of acceptable non-infringing substitutes;
  - (3) manufacturing and marketing capability to exploit the demand;
  - (4) the amount of the profit the patentee would have made.

*Panduit Corp. v. Stahl Bros. Fibre Works*, 575 F.2d 1152, 1156  
(6<sup>th</sup> Cir.1978)

# Reasonable Royalty

- If there are no commercial embodiments of the patent, e.g., a patent troll, or to the extent the patentee cannot prove lost profits, the patentee may still recover at least a reasonable royalty.
- The reasonable royalty analysis involves the judge or jury determining a royalty rate and applying that rate to the amount of infringing uses or sales.

# Reasonable Royalty

- To calculate a royalty rate, a court may look to:
  - A previously established royalty rate between the patentee and the infringer or in the industry
    - Databases of actual examples of royalty rates can be found in a number of sources, e.g., Royalty Source, IP Research Associates, Inc., Licensing Letter, LES
  - If there is no such established rate, the court must look to the supposed result of a hypothetical negotiation between the parties.
    - Requires the court to envision the terms of a licensing agreement reached between the patentee and the infringer at the time the infringement began.

## Reasonable Royalty

- Although the Federal Circuit has not prescribed a specific methodology for constructing a hypothetical negotiation, district courts often rely upon a wide range of factors from a non-exhaustive list first set forth in *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F.Supp. 1116, 1120 (S.D.N.Y. 1970) as probative of what rate the parties would have determined.

# Damages Apportionment

- Having determined that a reasonable royalty rate applies, a court must then determine the amount of infringing sales or uses, i.e., the royalty base.
- Although this task seems simple, it becomes difficult when components or products not covered by the asserted patent are sold along with patented components or products as parts of an entire product, system, or even a subassembly.
- Similarly, when damages are calculated on a theory of lost profits, it becomes difficult to determine whether such “convoyed” sales of non-patented components or products should be included as part of the profits lost by the patentee.

# Damages Apportionment

- A “convoyed sale” refers to the relationship between the sale of a patented product and a functionally associated non-patented product.
- Thus, regardless of which theory of recovery is used to determine damages, courts often need to address the separate issue of damages apportionment.

# Damages Apportionment Scenarios

- **Scenario 1** -- patent relating to power-saving features of remote-control devices.
  - The patentee sells remote controls covered by the patent along with plasma TVs with which the remote controls are sold.
  - The patentee brings an infringement suit against a competing plasma TV maker for selling infringing remote controls along with plasma TVs. The patentee is able to establish that “but for” the competitor’s infringement, the patentee would have sold a certain number of its patented remote controls along with a certain number of its plasma TVs.
  - **Should the patentee recover lost profits on diverted sales of its plasma TVs as well as diverted sales of the remote controls?**

# Damages Apportionment Scenarios

- **Scenario 2** -- a patent relating to screen-saving or anti burn-in features of a signal processor chip.
  - Signal processor chips having such patented features are incorporated in certain plasma TVs.
  - The patent is asserted against manufacturers and sellers of the plasma TVs with infringing signal processor chips.
  - **If the patentee is entitled to a reasonable royalty, should the reasonable royalty rate be applied to the value of the sales of the signal processor chips or to the value of the sales of the plasma TVs incorporating the chips?**

## Damages Apportionment using the “Entire Market Value Rule”

- “**Entire Market Value Rule**” -- a judicial doctrine used by courts to determine whether the patentee can recover damages based on the ***entire value*** of a marketed product or system that includes both patented and unpatented components.
  - The doctrine was discussed at length by the Federal Circuit in *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, (Fed.Cir. 1995) (en banc).

## Damages Apportionment using the “Entire Market Value Rule”

- The patent in Rite-Hite claimed a vehicle lock device to secure a truck trailer to a loading dock.
- The lock device was used with non-patented ramps that formed a bridge between the truck trailer and the loading dock



# Damages Apportionment using the “Entire Market Value Rule”

- In *Rite-Hite Corp.*, the Federal Circuit found that courts have often applied the entire market value rule for lost profit purposes to include diverted sales of unpatented components in situations in which the patented and unpatented components were **analogous to a single functioning unit.**
- The Federal Circuit also found that courts have typically applied the entire market value rule for reasonable royalty purposes to include in the royalty base unpatented components of a device when the unpatented and patented components are **parts of a single assembly or together constituted a functional unit.**

## Damages Apportionment using the “Entire Market Value Rule”

- While the Federal Circuit acknowledged that these past applications of the entire market value rule also involved inquiring whether the patented component is the basis for customer demand, the Federal Circuit found that courts ultimately based their decisions on whether the unpatented component functions together with the patented component in a manner to produce a desired end product or result.

# Damages Apportionment using the “Entire Market Value Rule”

- Thus, the Federal Circuit held:
  - The entire market value rule requires a showing that all the components together are analogous to components of **a single assembly** or are **parts of a complete machine**, or constitute **a functional unit**.
  - Entire market value rule should not be applied to components or items that may have been sold with an infringing device only as a matter of convenience or business advantage.

## Damages Apportionment using the “Entire Market Value Rule”

- Determining that a functional relationship exists between patented and unpatented components results in the scope of recoverable damages being highly dependent on the facts of the case.
- Nevertheless, in decisions following *Rite-Hite Corp.*, the Federal Circuit has consistently used certain factors in its application of the rule.

*American Seating Co. v. USSC Group, Inc.*,  
514 F.3d 1262 (Fed. Cir. 2008)

- ***American Seating Co. v. USSC Group, Inc.*** -- involved both lost profits on sales of products covered by the asserted patent and lost profits on accompanying sales of unpatented products.
  - **Case Summary:** a manufacturer and seller of mass transit passenger seats and wheelchair restraints sued its competitors for selling wheelchair restraints covered by its patent.
  - The jury awarded the patentee lost profits from diverted sales of the patentee's wheelchair restraints as well as diverted sales of accompanying passenger seats, but the district court set aside the verdict for the convoyed sales.



# *American Seating Co. v. USSC Group, Inc.,* 514 F.3d 1262 (Fed. Cir. 2008)

- **Federal Circuit Holding** – Applying the entire market value rule, the Federal Circuit affirmed.
  - The accompanying passenger seats were not covered by the claims of the asserted patent,
  - The wheelchair restraints operated independently of the passenger seats, the wheelchair restraints were not required to be sold together with the passenger seats, and
  - The passenger seats commanded a market value and served a useful purpose independent of the patented product.
- Thus, the Federal Circuit found no interrelated or functional relationship between the patented wheelchair restraints and the unpatented passenger seats sufficient for a jury award lost profits on conveyed sales of the passenger seats.

*Golden Blount, Inc. v. Peterson Co.* 438  
F.3d 1354 (Fed. Cir. 2006)

- ***Golden Blount, Inc. v. Peterson Co.*** – the owner of a patent relating to fireplace assemblies sued its direct competitor for selling a burner component of a patented assembly.
- Specifically, the competitor sold ember burner components that provide the flame pattern along with instructions on how end-users could assemble components to produce the patented burner assembly

# Golden Blount, Inc. v. Peterson Co. 438 F.3d 1354 (Fed. Cir. 2006)

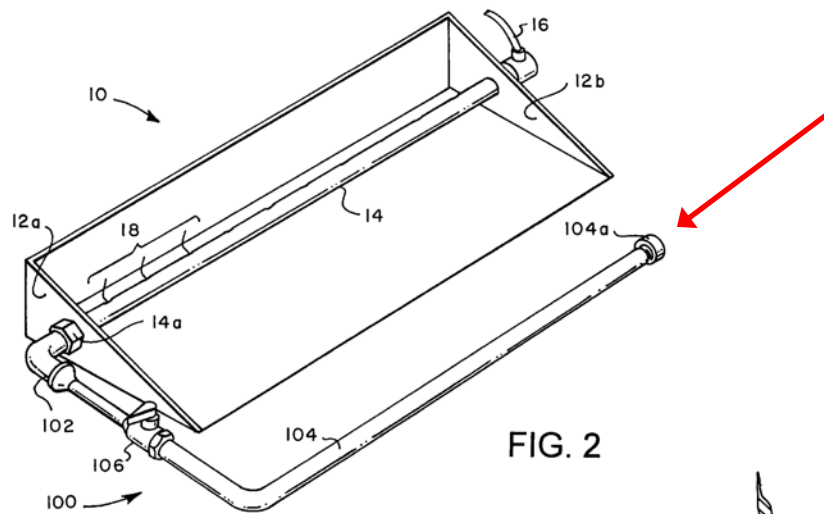


FIG. 2

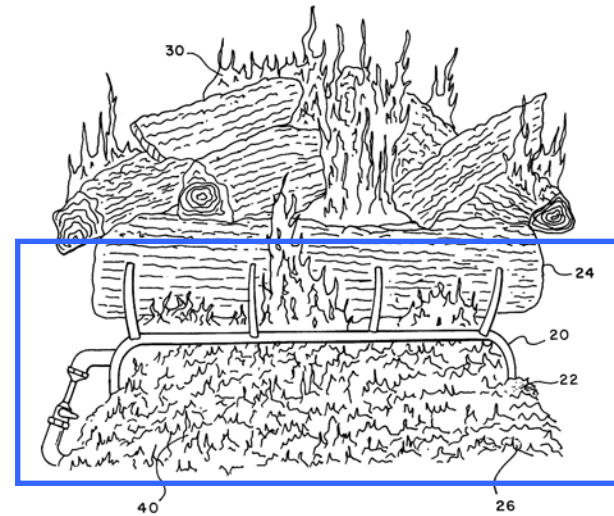


FIG. 4

U.S. Patent No. 5,988,159

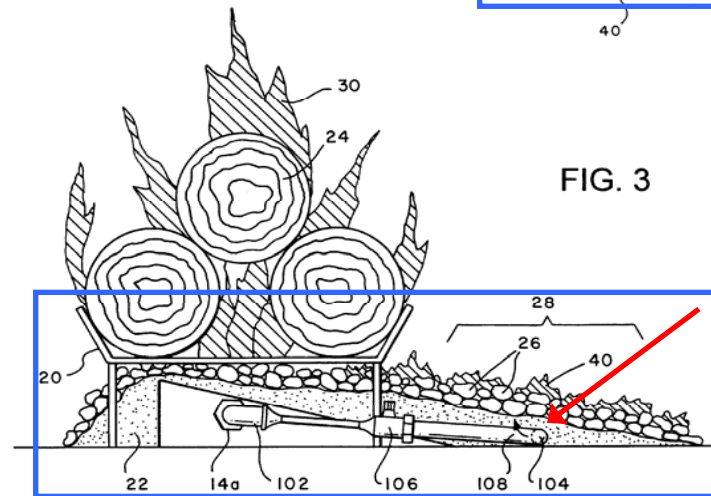


FIG. 3

*Golden Blount, Inc. v. Peterson Co.* 438  
F.3d 1354 (Fed. Cir. 2006)

- **District Court** -- Applying the entire market value rule, the patentee is entitled to lost profits on diverted sales of entire burner assemblies, including ember burner components, as well as diverted sales of accompanying grates and artificial logs.
  - The ember burner component produced a pleasing flame pattern and was the basis for customer demand of the entire burner assembly (even though the burner assembly is the actual patented invention)
  - The burner assembly, supporting grates and artificial logs constituted a functional unit.
  - The standard of practice in the industry was to sell the entire burner assembly along with accompanying grates and artificial logs together as a unit.

*Golden Blount, Inc. v. Peterson Co.* 438  
F.3d 1354 (Fed. Cir. 2006)

- **Federal Circuit Holding** – affirmed the district court, noting favorably its findings that
  - the entire burner assembly, including ember burner components, as well as diverted sales of accompanying grates and artificial logs, operated as a functional unit, and
  - The practice in the industry was to sell both the patented and unpatented articles together.

*Bose Corp. v. JBL, Inc.*, 274 F.3d 1354  
(Fed.Cir. 2001)

- ***Bose Corp. v. JBL, Inc.*** -- the patentee brought suit against a seller of loudspeaker systems for infringing its patent relating to ports inside loudspeaker enclosures.

# *Bose Corp. v. JBL, Inc.*, 274 F.3d 1354 (Fed.Cir. 2001)

U.S. Patent No. 5,714,721

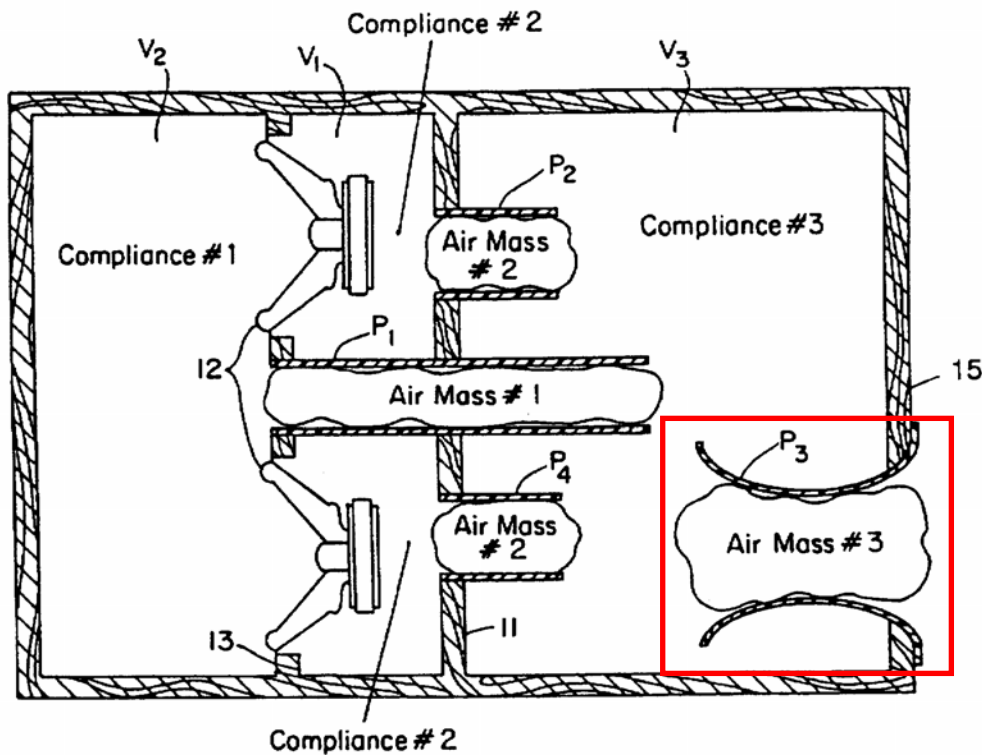


FIG. 1

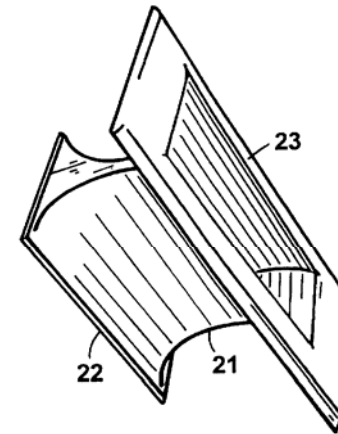


FIG. 2A

The tapered cross section of flared port tube  $P_3$  helps reduce turbulent airflow to the region outside the enclosure that might produce audible noise when radiating at high velocity levels.

*Bose Corp. v. JBL, Inc.*, 274 F.3d 1354  
(Fed.Cir. 2001)

- **District Court** -- calculated a reasonable royalty based on the entire value of the loudspeaker systems incorporating the accused ports, even though an accused port comprised only a small component of the system.
- **Federal Circuit Holding** -- The Federal Circuit affirmed the district court's award, noting that the district court found the patented invention "inextricably worked with other components of loudspeakers as a single functioning unit."

## *Bose Corp. v. JBL, Inc.*, 274 F.3d 1354 (Fed.Cir. 2001)

- Moreover, according to the Federal Circuit, the district court found substantial evidence that the patented invention was:
  - integral to the overall performance of loudspeakers,
  - the motivation for the infringer's decision to go forward with manufacturing and selling its loudspeakers, and
  - a substantial contribution to the increased demand for speakers sold by the patentee incorporating the patented ports.

# Summary of Factors Used in Application of the Entire Market Rule

- The factors considered by the Federal Circuit in applying the entire market value rule in these decisions provide a basis for predicting the apportionment of damages among patented and unpatented components.

# Summary of Factors Used in Application of the Entire Market Rule

- Factors favoring including entire market value:
  - The entire marketed product or system are covered by the claims of the asserted patent;
  - The patented component is integral to the overall performance of the entire product or system including unpatented components;
  - It is the industry standard or it is required to sell the unpatented components with the patented component as an entire product or system;
  - The patented component is the basis for customer demand or the basis for increased sales of the entire product or system in which it is incorporated;

# Summary of Factors Used in Application of the Entire Market Rule

- Factors favoring entire market value, continued:
  - The patented invention was the motivation for the infringer's decision to go forward with manufacturing and selling products or systems incorporating the patented invention;
  - The patentee and the infringer are direct competitors; and
  - It was reasonably foreseeable that the patentee would have made sales of the unpatented products “but for” the infringement.

# Summary of Factors Used in Application of the Entire Market Rule

- Factors not favoring entire market value:
  - The patented component or product operates independently of the unpatented component or product. and
  - The unpatented component or product serves a useful purpose independent of the patented component or product.

## Scenario 1 Revisited

- Recall the scenario of a patentee who sells commercial embodiments of a patent relating to power-saving features of a remote-control device.
- Applying the entire market value rule, it is unlikely that the patentee would recover profits lost on both sales of the patented remote controls as well as sales of its plasma TVs.

## Scenario 1 Revisited

- Although the patentee's plasma TVs may compete directly with the infringer's plasma TVs, it would be difficult for the patentee to prove that the patented power-saving features of the remote controls are integral to the overall performance of the plasma TVs with which the remote controls are sold.
- Difficult to prove that the power-saving feature of the remote control is the basis for customer demand or increased sales of the plasma TV.
- Customers may separately purchase or replace remote-control devices to obtain the features they desire without needing to purchase an entirely new plasma TV.

## Scenario 1 Revisited

- Thus, faced with this scenario, courts in evaluating the damages owed for infringement would likely limit the royalty base to the value of the remote-control devices and not consider the value of the plasma TVs with which the remote control device is used.

## Scenario 2 Revisited

- Recall the scenario of a patent relating to screen-saving or anti burn-in feature of a signal processor chip
- Applying the entire market value rule using the same factors would likely lead to a different result than Scenario 1.

## Scenario 2 Revisited

- To recover damages based on sales of plasma TVs with the signal processor chips, the patentee may prove that the processors do not operate independently of the plasma TVs but are made to function only inside the TVs.
- The patentee may also prove that the screen-saving or anti burn-in features of the processors are integral to the overall performance of the plasma TVs because they extend their life-span thus providing a major basis for customer demand and increased sales of the plasma TVs.
- Accordingly, faced with these facts, courts would likely calculate infringement damages using a royalty base that includes the value of the entire plasma TV rather than just the value of the signal processors.

## Scenario 3

- Tanaka-san, a designer at Fuji Innovation, Inc., (FII) designs an improvement on the iPod Shuffle by developing new ear buds and a new WiFi chip that eliminates the earphone jack and wires. FII obtains a patent on the combination of the WiFi chip and the ear buds (the “patented technology”) and sells an MP5 player including the patented technology.
- Nihon Fast Money (NFM) copies the MP5 player including the patented technology and sells the players at a deep discount taking many sales from FII.

## Scenario 3

- Suzuki-san of Shin Keitai Co. (SKC) needs to design a new hands-free cell phone for use when driving and uses the patented technology for both the MP5 player in the phone and as part of the technology for hands-free capability
- Sato-san of New Age Video Games (NAVG) must modify his company's popular game console to respond to a survey showing complaints from parents who hate hearing the noise when their children play video games

## Scenario 3

- Sato-san uses FII's patented technology in a device that plugs into the audio port of the game console so that only players wearing the ear buds can hear the noise of the video game
- FII discovers all of these uses of its patented technology and sues NFM, SKC, and NAVG
- What should be the results?

## Scenario 3

- FII v. Nihon Fast Money
  - FII, which has large, unused manufacturing capacity, should be able to prove that it is entitled to lost profits because other than NFM's infringing MP5 player there are no other MP5 players using WiFi connection to the ear buds.
  - The entire market value rule should apply because the patented technology (WiFi capability and ear buds) operate with the unpatented components of the MP5 player as one functional unit.

## Scenario 3

- FII v. Shin Keitai Co.
  - FII does not make cell phones so it will be entitled to a reasonable royalty based upon industry standard rates if they exist or the results of a hypothetical negotiation.
  - The entire market value rule should apply because the patented technology (WiFi capability and ear buds) operate with the unpatented components of the MP5 player and the cell phone as one functional unit.

## Scenario 3

- FII v. New Age Video Games
  - FII does not make video game consoles so it will be entitled to a reasonable royalty based upon industry standard rates if they exist or the results of a hypothetical negotiation.
  - The entire market value rule should not apply because the patented technology (WiFi capability and ear buds) is (1) an optional, add on component and not part of an integrated unit, (2) need not be sold or used with the unpatented components, i.e., the video game console, and (3) would not be the basis of consumer demand for the video game console.

# Conclusion

- As these scenarios demonstrate, a patentee's ability to recover damages based on the values of both patented and unpatented components will vary greatly with the technology and circumstances of each case.
  - Because the analysis is highly fact-specific, both parties have flexibility to emphasize different aspects of the analysis
  - The case law is sufficiently developed to guide juries and trial courts to the correct application of the entire market value rule

# Conclusion

- Developing a strategy on a response to a patent warning letter requires more than an assessment of the strength of the asserted patent, the strategic merit of the accused product, and possible legal fees.
- In a post *eBay* world the expense of past damages and an ongoing royalty may not be as costly as royalty demands being made by the patent owner
- A careful assessment of potential damages may tip the response strategy in one direction or another

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