

## CLAIM CONSTRUCTION AND DE NOVO REVIEW

### Lighting Ballast v. Philips

Nos. 2012-1014, 1015 (Fed. Cir. Mar. 15 2013)

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## How Do We Interpret Patents?

WHAT IS THE  
INVENTION?

vs.

WHAT DO THE WORDS  
OF THE CLAIMS MEAN?



A process for producing a  
dough product which is  
convertible upon finish  
cooking [in the microwave]

...

- ▣ heating the resulting  
batter-coated dough to a  
temperature in the range  
of about 400° F. to 850° F.  
for a period of time  
ranging from about 10  
seconds to 5 minutes ...

## *Review – Markman*

- ▣ Should juries construe patent claims?
- ▣ Seventh Amendment issue
- ▣ The inquiry:
  - Did juries construe patent claims under the common law in 1791?
  - Trick question – patents didn't have claims in 1791!

## *Markman Rulings*

- ▣ Fed. Cir. (1995)
  - “The patent is a fully integrated written instrument” and should be construed by the court.
  - “A patent is a government grant of rights to the patentee” therefore “the court is defining the federal legal rights created by the patent document.”
  - Extrinsic evidence can be helpful in resolving factual issues “en route to pronouncing the meaning of claim language as a matter of law”

## *Markman Rulings*

- ▣ Supreme Court (1996)
  - Focused on historical test – whether jury right existed in 1791
  - Called claim construction a “mongrel practice,” “fall[ing] somewhere between a pristine legal standard and a simple historical fact”
    - No “exact antecedent” in 1791
  - Comparing the “relative interpretive skills of judges and juries,” gave judges the claim construction role
  - Courts also better suited to make “necessarily sophisticated analysis of the whole document”
  - Noted “the importance of uniformity in the treatment of a given patent as an independent reason to allocate all issues of construction to the court”
  - Thus, claim construction is “exclusively within the province of the court”

## *Markman Rulings*

- ▣ Bottom line:
  - Claim construction is complex, messy and hard.
  - Better for judges, not juries, to do it.

## *Cybor: De Novo Review*

- ▣ Federal Circuit, 1998
- ▣ “The Supreme Court endorsed this court’s role in providing national uniformity to the construction of a patent claim, a role that would be impeded if we were bound to give deference to a trial judge’s asserted factual determinations incident to claim construction.”
- ▣ Bottom Line:
  - Judge decides = issue of law = de novo review
  - Deferential review = issue of fact = jury decides

## *Lighting Ballast – District Court*

- ▣ Lighting Ballast sued ULT on patent covering a device used in fluorescent lights, including “voltage source means”
- ▣ Defendant ULT argued on summary judgment that “voltage source means” is indefinite because element is means-plus-function and specification does not disclose any corresponding structure
- ▣ District court at first agreed, finding no evidence that “voltage source” is commonly used to mean “rectifier,” and that Lighting Ballast “relies on the description of the function,” and admits that other structures could perform the function, e.g. a battery



## *Lighting Ballast – District Court*

- ▣ On reconsideration, district court reversed
- ▣ District court relied on expert and inventor testimony that one skilled in the art would understand that “voltage source means” connotes a “rectifier . . . or other structure capable of supplying usable voltage”

## *Lighting Ballast I*

- ▣ ULT appealed, and the Federal Circuit reversed:

[T]estimony of one of ordinary skill in the art cannot supplant the total absence of structure from the specification

## Petition for *En Banc* Review

- ▣ Parties disputed whether Lighting Ballast is an appropriate vehicle for revisiting *Cybor* holding that factual findings are reviewed de novo
  - Lighting Ballast: panel's decision turned on a "question of fact," whether the claim language "connotes a class of structures" to those of skill in the art; panel reviewed without deference, in violation of FRCP 52(a)(6), and reversed
  - ULT: panel accepted the only factual finding, and reversed the district court on the application of the law to the facts; no *Markman* hearing, no tutorial, no live testimony, paper record, inappropriate vehicle for revisiting *Cybor*

## Order Granting *En Banc* Review

- ▣ Should this court overrule *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448 (Fed. Cir. 1998)?
- ▣ Should this court afford deference to any aspect of district court's claim construction?
- ▣ If so, what aspects should be afforded deference?

## ULT *En Banc* Brief

- ▣ Meaning of legal instruments, e.g., contracts, wills, statutes, is a matter of law, reviewed de novo
- ▣ De novo review for analysis of intrinsic evidence, and where extrinsic evidence used to educate the court rather than resolve disputed factual issues
- ▣ “Ultimate meaning and legal effect of claim terms and the scope of claim limitations are legal issues” reviewed de novo

## ULT *En Banc* Brief

- ▣ Risks of deference:
  - Claim construction framed as disputed factual issue leading to battle of experts
    - ▣ Undermine uniformity
    - ▣ Encourage forum shopping
- ▣ Bottom line:
  - Deference only to “disputed issues of historical fact” e.g. common or specialized meaning at the time of the invention

## Lighting Ballast *En Banc* Brief

- ▣ Claim construction is a “mongrel practice” with “evidentiary underpinnings”
- ▣ Rule 52 does not allow “arbitrary boundaries” between factual findings depending on evidence relied on and whether disputed
  - Does not matter whether fact is “ultimate” or “subsidiary”
- ▣ Claim “interpretation” is a question of “ultimate fact” – “what meaning one of ordinary skill in the art would impute to the words of the claim in the context of the intrinsic record”

## Lighting Ballast *En Banc* Brief

- ▣ Deferential review of “mixed” questions of law and fact if district court is “better positioned” to decide issues
- ▣ District court better equipped to construe claims: develop evidentiary record, ability to call and appoint experts, not limited by “strict time and page limits”
- ▣ Finality more important than uniformity
- ▣ Bottom line:
  - Clear error review for all claim construction issues



## Google Amicus Brief

- ▣ Claim construction pure question of law:  
“interpreting a set of legal words” is “purely legal”
  - Contracts, statutes, wills – even if dictionaries, experts consulted to assist court to understand perspective of POSITA
  - *Markman* found matter of law for court, despite “mongrel practice” / “evidentiary underpinnings”
- ▣ Judicial “findings” are not factual (plain and ordinary meaning) or should not drive claim construction (e.g. expert credibility)
- ▣ Contradictory extrinsic evidence merely confirms primary of intrinsic evidence

## Google Amicus Brief

- ▣ Risks of deference:
  - Lack of uniformity – property rights would not have “true and final character”
  - Reliance on extrinsic evidence rather than intrinsic record
  - Undermine public notice function of claims
  - Delay in resolving construction disputes until factual record fully developed

## Cisco Amicus Brief

- ▣ *Markman*: claim construction “matter of law reserved entirely for the court”
- ▣ Notice: patent is a legal instrument, defining property right, binding on the public
- ▣ Reliance on extrinsic evidence leads to “zone of uncertainty” surrounding boundary of property right, hampering innovation

## Cisco Amicus Brief

- ▣ Importance of uniformity, application of *stare decisis* support de novo review
  - “Vertical uncertainty” has less impact than “horizontal” uncertainty
- ▣ Deference leads to uncertainty, delay, increased cost of litigation, forum shopping
- ▣ Demeanor, credibility of “doubtful” importance
- ▣ If intrinsic evidence cannot resolve meaning, term is likely indefinite

## Menell Amicus Brief

- ▣ Supreme Court in *Markman*: claim construction a “mongrel practice” merely “within the province of the court”
  - Did not characterize claim construction as “pure question of law”
  - Cedes to judge underlying factual findings routinely resolved during trial, e.g., evidentiary decisions subject to “abuse of discretion” review

## Menell Amicus Brief

- ▣ Claims must be interpreted from point of view of POSITA, requiring fact-finding  
BUT
- ▣ *Vitronics* discourages “learning from skilled artisans,” “using evidentiary techniques for resolving dispute”
- ▣ Courts not motivated to create full factual record, explain factual underpinnings of decisions – reliance on extrinsic evidence risks reversal
- ▣ Deprives appellate court of full record

## Menell Amicus Brief

- ▣ Costs of de novo standard:
  - Lower quality decision-making at trial and appellate levels
  - Higher costs due to more appeals and retrials
  - Delay settlement
- ▣ Hybrid review, deferring to factual findings, recognizes “inherently factual aspects of claim construction”
  - Meaning from the perspective of a skilled artisan
  - Encourage use of tools to develop full evidentiary record
- ▣ De novo review has little practical impact on notice, uniformity

## Does *Markman* Bar or Dictate Deference?

### DE NOVO REVIEW

- ▣ Claim construction “matter of law reserved entirely for the court”
- ▣ Extrinsic evidence does not imply factual finding, must comport with intrinsic evidence, preserve “patent’s internal coherence”
- ▣ Uniform treatment independent reason

### DEFERENCE

- ▣ “Mongrel” practice – mixed law and fact
- ▣ Did not address standard of review
- ▣ Fact-oriented hypothetical inquiry of what a POSITA at the time of the invention would have understood
- ▣ Supreme Court was more nuanced than fact vs law



## Nature of Claim Construction

### PURELY LEGAL

- ▣ Legal instrument
- ▣ Notice requirement – cannot turn on credibility of expert
- ▣ Boundaries of property right
- ▣ Background, context is not “factual finding”

### MIXED LAW AND FACT

- ▣ POSITA inquiry
- ▣ Extrinsic evidence
- ▣ Technology
- ▣ Credibility of experts
- ▣ Overall context of the dispute

## Which Matters More: Appellate Expertise or Depth of Context?

### APPELLATE EXPERTISE

- ▣ Expertise in claim construction, equally capable of analyzing intrinsic evidence and
- ▣ Unlike trial court, focus on a few key issues
- ▣ “Three heads are better than one”
- ▣ Informal deference to encourage full discussion of context, reasoning

### DEPTH OF CONTEXT

- ▣ No judge is a POSITA
- ▣ Studies show – reasonable judicial minds can differ
- ▣ Appellate judges have no unique insights
- ▣ Trial courts can see the full context
  - Depth of context is hidden under current cases, where incentive is to write only about “legal” bases for construction

## Which Approach Better Serves System and Process Values?

### DE NOVO

- ▣ Deference likely to delay construction – fully developed factual record
- ▣ Public notice cannot turn on extrinsic evidence esp. expert testimony
- ▣ Uniform treatment of property right across jurisdictions
- ▣ Precedent favors de novo review

### DEFERENCE

- ▣ Earlier certainty of claim construction leads to better, earlier settlements
- ▣ Reduced costs due to fewer retrials on remand
- ▣ “Public notice” no better served by either approach
- ▣ Neither precedent nor issue preclusion significantly favors de novo review

## Boundaries of De Novo Review?

- ▣ Fact vs Law
  - Historical fact?
  - Scientific fact?
  - What defines a “factual finding” in claim construction? Extrinsic evidence only?
- ▣ Scope/Context
  - Meaning of single word vs. meaning of entire element in context of specification
  - Credibility assessments
  - POSITA-oriented inquiry
- ▣ Legal Process Values
  - Efficient and cost-effective
  - Respected results → litigants, public at large
  - Institutional competence
  - Constitutional requirements

## Factual Finding?

- ▣ Consulting dictionary or treatise
- ▣ Technical tutorial
- ▣ Crediting one expert over another
- ▣ Finding that dictionary, treatise or expert testimony aligns with description in specification
- ▣ How a POSITA would have understood the claim term at the time of the invention

## Practical Impact of Deference

### CON

- ▣ Delay resolution
- ▣ Lack of uniformity – scope, validity dependent on jurisdiction and extrinsic evidence
- ▣ Encourage heavy reliance on expert testimony
- ▣ Informal deference, due weight to careful reasoning will encourage greater transparency

### PRO

- ▣ Encourage earlier settlement
- ▣ Reduce litigation costs – avoid retrials
- ▣ Encourage greater transparency in factual and contextual bases of district court rulings

## De Facto “Informal” Deference?

- ❑ Menell and Anderson study (2001-2012)
- ❑ Before *Phillips*, Federal Circuit reversed claim constructions >40% of the time
- ❑ After *Phillips*, Federal Circuit reversals of claim constructions dropped immediately and significantly
- ❑ Menell and Anderson conclude the best explanation is that the Federal Circuit has “informally” increased its deference to district courts
- ❑ Deferential review would give district courts incentive to provide richer legal and factual rationales for their claim constructions

## Claim Construction Reversals

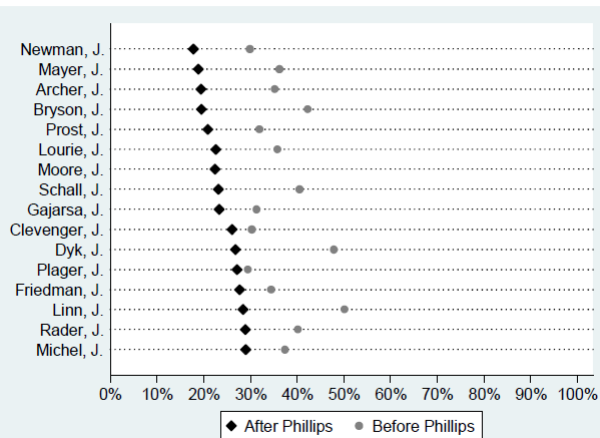
**Figure 2: Reversal Rate – Per Claim Term Basis**  
(100 Term Rolling Average)





## All CAFC Judges Defer More

Chart 1: Percentage of Reversal Votes by Judge



## Use of Extrinsic Evidence



## Use of Specific Kinds of Evidence

DICTIONARIES



EXPERTS



Questions?