In the United States Court of Appeals for the Federal Circuit

LIGHTING BALLAST CONTROL LLC.

Plaintiff-Appellee,

v.

PHILIPS ELECTRONICS NORTH AMERICA CORPORATION,

Defendant,

and

UNIVERSAL LIGHTING TECHNOLOGIES, INC.,

Defendant-Appellant.

Appeal from the United States District Court for the Northern District of Texas, Case No. 09-cv-0029. The Honorable **Reed O'Connor**, Judge Presiding.

PETITION FOR REHEARING EN BANC

ROBERT P. GREENSPOON FLACHSBART & GREENSPOON, LLC 333 N. Michigan Avenue, 27th Floor Chicago, IL 60601 (312) 551-9500

Dated: January 31, 2013

ANDREW J. DHUEY 456 Boynton Avenue Berkeley, CA 94707 (510) 528-8200

DAVID S. SKEELS FRIEDMAN, SUDER & COOKE 604 East 4th Street, Suite 200 Fort Worth TX 76102 (817) 334-0400

JONATHAN T. SUDER

Lighting Ballast Control LLC

Attorneys for Plaintiff-Appellee,



CERTIFICATE OF INTEREST

Counsel for Appellee Lighting Ballast LLC, certifies the following:

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

Control LLC.

2. The name of the real party in interest I represent is: Lighting Ballast Control

LLC.

3. All parent corporations and any publicly held companies that own 10 percent or

more of the stock of the party or amicus curiae represented by me are: Lighting

Ballast Control LLC is a wholly owned subsidiary of Acacia Research Group LLC,

which is a wholly owned subsidiary of Acacia Research Corporation.

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:

Robert P. Greenspoon

William W. Flachsbart

Andrew J. Dhuey

David Skeels Flachsbart & Greenspoon, LLC Glenn Orman

Friedman, Suder & Cooke

Jonathan T. Suder

Date: January 31, 2013

Counsel of Record

Robert P. Greenspoon

Flachsbart & Greenspoon, LLC 333 N. Michigan Ave., 27th FL

Chicago, IL 60601

(312) 551-9500

i

TABLE OF CONTENTS

CER'	TIFICATE OF INTEREST	i
TAB	LE OF CONTENTS	. ii
TAB	LE OF AUTHORITIES	iii
STA	TEMENT OF COUNSEL	. 1
ARG	UMENT FOR REHEARING EN BANC	. 2
I.	Summary of Argument	. 2
II.	This Case Is An Appropriate Vehicle Through Which to Overrule <i>Cybor</i>	. 6
III.	The Additional Issue of Waiver in This Case Permits the Court to Resolve an Important Question Raised by Overruling <i>Cybor</i>	12
IV.	The Nonprecedential Designation of the Panel Decision Has No Bearing on the Worthiness of This Case for <i>En Banc</i> Rehearing	13
CON	CLUSION	15
ADD	ENDUM: OPINION	
CFR'	TIFICATE OF SERVICE	

TABLE OF AUTHORITIES

CASES	<u>Page</u>
Amgen, Inc. v. Hoechst Mario Roussel, Inc., 469 F.3d 1039 (Fed. Cir. 2006)	3
Anderson v. Bessemer City, 470 U.S. 564 (1985)	9
Banuelos v. Construction Laborers' Trust Funds for So. Calif., 382 F.3d 897 (9th Cir. 2004)	5
Barber v. Louisville & Jefferson Co. Metro. Sewer Dist., 295 Fed. Appx. 786 (6th Cir. 2008) (nonprecedential)	5
Becker v. Tidewater, Inc., 586 F.3d 358 (5th Cir. 2009)	5
Black v. J.I. Case Co., 22 F.3d 568 (5th Cir. 1994)	5
Chesapeake Paper Prods. Co. v. Stone & Webster Eng'g Corp., 51 F.3d 1229 (4th Cir. 1995)	1, 5
Comtech EF Data Corp. v. Radyne Corp., 2007 U.S. Dist. LEXIS 97038 (D. Ariz. 2007)	2
Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448 (Fed. Cir. 1998) (en banc)	passim
Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665 (Fed. Cir. 2008) (en banc)	3, 11
Feld v. Feld, 688 F.3d 779 (D.C. Cir. 2012)	5
<i>Graham v. John Deere Co.</i> , 383 U.S. 1 (1966)	1. 5

417 F.3d 1241 (Fed. Cir. 2005)	12
Houskins v. Sheahan, 549 F.3d 480 (7th Cir. 2008)	5
Ji v. Bose Corp., 626 F.3d 116 (1st Cir. 2010)	., 5
Jimenez v. Wood County, 660 F.3d 841 (5th Cir. 2011) (en banc)	6
KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727 (2007)	13
Lopez v. Tyson Foods Inc., 690 F.3d 869 (8th Cir. 2012)	., 5
Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996)	, 9
Mass. Inst. of Tech. v. Abacus Software, 462 F.3d 1344 (Fed. Cir. 2006)	7
Ortiz v. Jordan, 131 S. Ct. 884 (2011)	, 6
Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561 (Fed. Cir. 1987)	3
Pullman-Standard v. Swint, 456 U.S. 273 (1982)	., 5
Rembrandt Data Techs., LP v. AOL, 641 F.3d 1331 (Fed. Cir. 2001)	6
Retractable Techs. v. Becton, Dickinson & Co., 659 F.3d 1369 (Fed. Cir. 2011)	3

Revolution Eyewear Inc. v. Aspex Eyewear Inc., 563 F.3d 1358 (Fed. Cir. 2009)
Rothstein v. Carriere, 373 F.3d 275 (2d Cir. 2004)
Wade v. Hewlett-Packard Dev. Co. LP Short Term Disability Plan, 493 F.3d 533 (5th Cir. 2007)
Wolfgang v. Mid-Am. Motorsports, 111 F.3d 1515 (10th Cir. 1997)
RULES
Fed. R. App. P. 35
Fed. R. Civ. P. 50
Fed. R. Civ. P. 51
Fed. R. Civ. P. 52
OTHER AUTHORITIES
Federal Circuit Internal Operating Procedures
United States Invitation Brief in KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727 (2007)
United States Invitation Brief in Retractable Technologies, Inc. v. Becton, Dickenson and Co., 133 S. Ct. 72 (2012)

STATEMENT OF COUNSEL

Based on my professional judgment, I believe the panel decision is contrary to the following precedents of the Supreme Court: *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996); *Pullman-Standard v. Swint*, 456 U.S. 273 (1982); *Graham v. John Deere Co.*, 383 U.S. 1 (1966); and *Ortiz v. Jordan*, 131 S. Ct. 884 (2011).

Also, under Federal Rule of Appellate Procedure 35(b)(2), I believe that the panel decision "conflicts with the authoritative decisions of other United States Courts of Appeals that have addressed the issue" of whether an appellate court has the power to review a denial of summary judgment after a trial has taken place, when the appellant's arguments of alleged legal error were not preserved for appeal under Federal Rule of Civil Procedure 50(b). *See Ji v. Bose Corp.*, 626 F.3d 116, 127-28 (1st Cir. 2010); *Chesapeake Paper Prods. Co. v. Stone & Webster Eng'g Corp.*, 51 F.3d 1229, 1235 (4th Cir. 1995); *Lopez v. Tyson Foods Inc.*, 690 F.3d 869, 875 (8th Cir. 2012).

Furthermore, I believe this petition raises one or more precedent-setting questions of exceptional importance: (1) whether clear error is the standard of review for district court claim construction factual findings that rely on careful review of an expert's testimony of what persons of skill in the art would understand; and (2) whether a denial of summary judgment after a full trial on the

merits is appealable, where the appellant did not address the summary judgment issue in a JMOL motion under Federal Rule of Civil Procedure 50 and even adopted and embraced the trial court's conclusion, as evidenced by its proposed jury instructions and by the testimony it solicited from its expert.

ARGUMENT FOR REHEARING EN BANC

I. Summary of Argument.

This case squarely presents the question of whether *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448 (Fed. Cir. 1998) (*en banc*) was correctly decided. Here, the district court expressly found, as a factual matter, and based on its review of expert testimony, that the claim language "voltage source means providing a constant or variable magnitude DC voltage between the DC input terminals" connotes a class of structures to those skilled in the applicable art:

Like the term at issue in *Comtech* [*EF Data Corp. v. Radyne Corp.*, 2007 U.S. Dist. LEXIS 97038, *33-38 (D. Ariz. 2007)], *the Court finds* that while the "voltage source means" term does not denote a specific structure, it is nevertheless understood by persons of skill in the lighting ballast design art to connote a class of structures, namely a rectifier, or structure to rectify the AC power line into a DC voltage for the DC input terminals.

J.A. 22 (emphasis added).

Under *Cybor*, the panel judges in this case were required to review the above factual finding *de novo*:

Whether a claim limitation invokes means-plus-function claiming under $\S 112$, $\P 6$, is a matter of claim construction and therefore a

question of law that we review without deference. *See Cybor Corp. v. FAS Techs.*, *Inc.*, 138 F.3d 1448, 1454–55 (Fed. Cir. 1998) (en banc).

Panel Op. 7. As a majority of the active judges of the Federal Circuit recognizes, this is the wrong standard of review for trial court factual findings incident to claim construction.¹

The longstanding need to overrule *Cybor* and to give the requisite deference to trial court fact-finding incident to claim construction is, by itself, ample justification for rehearing this appeal *en banc*. This is true even if the full Court were to reach the same conclusion of patent invalidity as the panel did on the merits. *See, e.g., Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665 (Fed. Cir. 2008) (*en banc*) (full Court reached same conclusion of noninfringement as panel majority, albeit under different legal standard for design patent infringement); *cf. Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561 (Fed. Cir. 1987) (on remand from the Supreme Court for further consideration in light of Fed. R. Civ. P. 52(a), applying "clearly erroneous" review standards to subsidiary obviousness factual findings and reaching same outcome as before).

_

¹ See, e.g., Cybor, 138 F.3d at 1474 (Rader, J., dissenting); Amgen, Inc. v. Hoechst Mario Roussel, Inc., 469 F.3d 1039, 1043 (Fed. Cir. 2006) (Newman, J., dissenting from denial of rehearing en banc); id. at 1045 (Gajarsa, J., joined by Linn, J. and Dyk, J., concurring in denial of reh'g en banc) (willing to reconsider Cybor where claim construction depends on extrinsic evidence); Retractable Techs. v. Becton, Dickinson & Co., 659 F.3d 1369, 1373 (Fed. Cir. 2011) (Moore, J. and O'Malley, J., dissenting from denial of rehearing en banc).

The result in this case, however, would not be the same once *Cybor* is overruled and claim construction is properly viewed as a mixed question of law and fact. At that point, the question of whether Defendant-Appellant Universal Lighting Technologies, Inc. ("Universal") waived arguments it made in moving for summary judgment but did not make later (*e.g.*, in a JMOL motion), is clearly governed by *Ortiz v. Jordan*, 131 S. Ct. 884 (2011) (mixed questions of law and fact not preserved for appellate review after full trial on merits unless preserved in JMOL motion). The panel rejected Plaintiff-Appellee Lighting Ballast Control LLC ("Lighting Ballast")'s waiver arguments on the ground that the trial court's "claim construction . . . ruling concerned only questions of law." Panel Op. 6. This was a correct statement of law under *Cybor*, but *Cybor* itself misstates the law.

Because of Cybor, the panel decision thus presents two separate and compelling questions for the Supreme Court if and when it is asked to review this Court's rulings. First, just nine weeks ago, the U.S. Solicitor General opined that the question of whether "a court of appeals should apply a deferential standard in reviewing factual determinations made by a district court in the course of construing a disputed patent claim . . . is of substantial and ongoing importance in patent law." Retractable Techs., Inc. v. Becton, Dickenson and Co., 133 S. Ct. 72 U.S. Invitation 7 (available http://www.justice. (2012),Br. at gov/osg/briefs/2012/2pet/6invit/2011-1154.pet.ami.inv.pdf) (citing two Supreme

Court decisions conflicting with *Cybor*: *Pullman-Standard v. Swint*, 456 U.S. 273 (1982) and *Graham v. John Deere Co.*, 383 U.S. 1 (1966)). Second, *Cybor* has needlessly forced this Court to deepen the well-developed circuit split on whether a court of appeals has the power to review a denial of summary judgment that was based on a purely legal argument, even if that argument was not preserved via a motion for JMOL.² Claim construction is not a purely legal issue – it is a mixed question of fact and law, and thus, under *Ortiz*, claim construction arguments not asserted in a motion for JMOL after a trial on the merits are not preserved for appeal.

By granting this petition, overruling *Cybor*, and then applying *Ortiz* to the question of waiver, this Court would likely have the last word on appellate review of trial court claim construction. The question the Solicitor General deemed worthy

² Waiver: Lopez v. Tyson Foods Inc., 690 F.3d 869, 875 (8th Cir. 2012); Ji v. Bose Corp., 626 F.3d 116, 127-28 (1st Cir. 2010); Chesapeake Paper Prods. Co. v. Stone & Webster Eng'g Corp., 51 F.3d 1229, 1235 (4th Cir. 1995); Black v. J.I. Case Co., 22 F.3d 568, 571 n.5 (5th Cir. 1994). No waiver: Feld v. Feld, 688 F.3d 779, 781-82 (D.C. Cir. 2012); Becker v. Tidewater, Inc., 586 F.3d 358, 365 n. 4 (5th Cir. 2009); Revolution Eyewear Inc. v. Aspex Eyewear Inc., 563 F.3d 1358, 1366 n.2 (Fed. Cir. 2009); Houskins v. Sheahan, 549 F.3d 480, 489 (7th Cir. 2008); Barber v. Louisville & Jefferson Co. Metro. Sewer Dist., 295 Fed. Appx. 786, 789 (6th Cir. 2008) (nonprecedential); Banuelos v. Construction Laborers' Trust Funds for So. Calif., 382 F.3d 897, 902 (9th Cir. 2004); Rothstein v. Carriere, 373 F.3d 275, 284 (2d Cir. 2004); Wolfgang v. Mid-Am. Motorsports, 111 F.3d 1515, 1521 (10th Cir. 1997). The Fifth Circuit would resolve its own intra-circuit conflict in favor of waiver. Wade v. Hewlett-Packard Dev. Co. LP Short Term Disability Plan, 493 F.3d 533, 542 (5th Cir. 2007) ("When there are conflicting panel decisions, the earliest panel decision controls.").

of Supreme Court review would be resolved, and this case would no longer be a vehicle for addressing the inter-circuit split on waiver of purely legal errors not preserved in post-trial JMOL motions.³ There would also be no reason for this Court to address the claim-definiteness merits because, under *Ortiz*, Universal failed to preserve those arguments (and many others) on appeal. *See* Lighting Ballast (red) Br. 35, 37, 43, 45. Now is the time and this is the case in which the full Court should overrule *Cybor*.

II. This Case Is An Appropriate Vehicle Through Which to Overrule *Cybor*.

The panel recognized that its decision turned on a question of fact, namely: is the claim language "voltage source means providing a constant or variable magnitude DC voltage between the DC input terminals" understood by those skilled in the lighting ballast art to connote a defined class of structures? If it is, then under *Rembrandt Data Techs.*, *LP v. AOL*, 641 F.3d 1331, 1340–41 (Fed. Cir.

_

³ This Petition accepts the panel's characterization of the claim construction issue being fully encompassed within a "prior pretrial ruling" – namely, the denial of Universal's indefiniteness summary judgment motion. The full Court, of course, would be empowered to affirm *Cybor*, recharacterize claim construction as an issue of law intertwined with jury instructions, and find waiver through a different path – namely, Universal's own jury charge submission of a "rectifier" as the proper construction, J.A. 5202, coupled with its complete failure to object to that jury instruction under Fed. R. Civ. P. 51. *See Jimenez v. Wood County*, 660 F.3d 841 (5th Cir. 2011) (*en banc*) (finding appellate waiver of issues of law when not raised in timely jury charge objections). Universal relied on this construction during its invalidity case, by eliciting expert testimony in which the expert pointed to rectifiers within the prior art. J.A. 13187-88.

2001), means-plus-function claiming rules do not apply and the claim language itself is sufficient to avoid indefiniteness. In that scenario, there would be no need for disclosure of corresponding structure in the specification. Panel Op. 9. *See also Mass. Inst. of Tech. v. Abacus Software*, 462 F.3d 1344, 1354-56 (Fed. Cir. 2006) (Dyk, J.); *id.* at 1363-64 (Michel, C.J., dissenting).

At the district court, the parties argued their positions on this factual question, each side urging the trial court to make particular factual findings based on the expert testimony. In moving for summary judgment, Universal summarized the parties' disagreement as follows:

LBC argues that "the only structure that an electronic lighting ballast would ever use to convert AC to DC is a rectifier," citing Dr. Robert's testimony. LBC Response at 46. But the "voltage source means" of claim 1 of the '529 patent does not claim a means for "convert[ing] AC to DC;" rather, it claims a means for "providing a constant or variable magnitude DC voltage between the DC input terminals." And, as Dr. Roberts testified, claim 1 is not limited to a ballast that draws power from an AC source; its "voltage source means" may also be a battery, a DC generator, a solar cell, "or any other sources of DC power supply," A614-620. . . . As a result, Dr. Roberts' own testimony – which is consistent with Mr. Bobel's earlier deposition testimony on this point – confirms that the "voltage source means" of claim 1 is not understood by one of ordinary skill to be a particular structure or "class of structures" that converts AC to DC, namely a rectifier.

J.A. 3827. Universal thus asked the district court to set aside Dr. Roberts' particularized testimony that persons of skill in the art would perceive only the structure of a "rectifier" after reviewing this patent's intrinsic record, in favor of

Dr. Roberts' *generalized* testimony that other structures might come to mind in different contexts. The record also shows that Universal relied on loaded questions to Dr. Roberts, which assumed-as-fact Universal's intended and desired answers, *e.g.*, "Q. So what would be the voltage source means for this ballast if it was used with a DC generator? A. The DC generator. . . ." J.A. 1621.

As the panel observed, the district court did not credit Universal's litigation techniques, but sided with Lighting Ballast on the question of how this claim language is understood by those skilled in the applicable art, and it made an express factual finding on the matter:

The court found that, according to the limitation's ordinary meaning, the claimed "voltage source means" corresponds to a class of structures: a rectifier for common applications in which the claimed device is used with an AC power line; and a battery or the like for less commonly used applications in which a DC power line is used.

Panel Op. 5 (emphasis added).

In reviewing the trial court's claim construction, the panel began its analysis with the observation that Cybor controls its review of whether the claim language itself discloses sufficient structure: "Whether a claim limitation invokes meansplus-function claiming under § 112, ¶ 6, is a matter of claim construction and therefore a question of law that we review without deference. *See Cybor Corp.*" Panel Op. 7.

Giving no deference to the trial court's factual finding, the panel agreed with Universal's recharacterization of the evidentiary record, that "voltage source means" does not correspond to a class of structures. "While a rectifier and a battery may be examples of structures that commonly perform the recited function, there are many other ways to provide DC voltage, including 'generators' and 'solar voltaic cells,' as Lighting Ballast's expert admitted." Panel Op. 10.

In effect, *Cybor* forced the panel to review the evidentiary record anew and to make an appellate factual finding on whether the "voltage source" limitation does or does not correspond to a class of structures. Under *Markman*, as properly applied, the appellate court is not permitted to set aside the trial court's factual finding unless it is "clearly erroneous" under Federal Rule of Civil Procedure 52(a)(6). Under the clear error standard of review,

[i]f the district court's account of the evidence is plausible in light of the record viewed in its entirety, the court of appeals may not reverse it even though convinced that had it been sitting as the trier of fact, it would have weighed the evidence differently. Where there are two permissible views of the evidence, the fact finder's choice between them cannot be clearly erroneous. . . . This is so even when the district court's findings do not rest on credibility determinations, but are based instead on physical or documentary evidence or inferences from other facts.

Anderson v. Bessemer City, 470 U.S. 564, 573-73 (1985).

The trial court's factual finding was, at a minimum, "plausible" under Anderson v. Bessemer City. Universal conducted a highly misleading deposition

examination of Lighting Ballast's expert, Dr. Roberts. Universal was careful to *avoid* asking whether the claim language connotes non-rectifier structures to persons of skill in the art. Universal instead made Dr. Roberts *assume* the conclusion that the "voltage source" limitation reads on DC batteries, DC generators and DC solar cells. Those questions and answers – which the district court correctly disregarded – did not reflect actual evidence that the "voltage source" claim language connotes anything other than a rectifier to one of ordinary skill in the art:

DC Battery (J.A. 1620-1621):

Q. I just want to understand, though, what you would say the structure that corresponds or that is identified by voltage source means is. [I]f it were used with a DC battery, it would be the DC battery itself. Is that correct?

A. Or any other DC power source such as a solar cell, yes.

DC Generator (**J.A.** 1621):

Q. So what would be the voltage source means for this ballast if it was used with a DC generator?

A. The DC generator. . . .

DC Solar Cell (J.A. 1622):

Q. And if ballast [sic] of figure 1 were used with a solar cell, what would you understand the voltage source means to be?

A. The solar cell.

Such imprecise and loaded questioning about hypothetical modifications to Figure 1 of the patent created a muddled, ambiguous and tautological record. It did not lay a foundation for any proper factual finding contrary to the district court's "rectifier" finding. In fact, DC power sources are not mutually exclusive of rectifiers. Dr. Roberts pointedly testified that that "the full wave bridge [rectifier] ... can be there [i.e., included within the ballast circuitry] and it [the ballast] can be used for either AC or DC." (J.A. 1621-22). At a minimum, the "rectifier" factual finding should be respected on appeal as plausible, even if a judge of this Court would have weighed the evidence differently as the fact-finder.

Regardless of whether the disputed trial court factual finding in this case is clearly erroneous, the full Court should rehear this case *en banc* to overrule *Cybor* and to apply the correct standard of review for trial court fact-finding incident to claim construction.⁴ This issue is at least as important jurisprudentially as the standard for design patent infringement at issue in *Egyptian Goddess*, where the full Court reached the same result as the panel decision. The standard of review at issue here applies to *all* trial court fact-finding incident to claim construction, regardless of the type of patent.

⁴ This Petition does not address the panel's decision to reach the second prong of the means-plus-function analysis – whether the specification clearly links the "voltage source means" function with a rectifier to a person of skill in the art. Lighting Ballast recognizes, though, that this question might become relevant under full Court review.

III. The Additional Issue of Waiver in This Case Permits the Court to Resolve an Important Question Raised by Overruling *Cybor*.

If the full Court overrules *Cybor* on the ground that claim construction is a mixed question of law and fact, the panel's basis for rejecting Lighting Ballast's waiver argument would no longer apply. Panel Op. 6 (claim construction "concern[s] only questions of law"). Rejection of *Cybor* would immediately create an open and important question about whether it is necessary to move for JMOL during and after a full trial on the merits to preserve claim construction arguments for appellate review.

Uncertainty in the trial courts on this issue would inevitably lead to waivers of critical claim construction arguments by counsel who fail to preserve them through JMOL motions. This case is thus an ideal vehicle through which to overrule *Cybor*, because the full Court can then address the waiver implications of reviewing claim construction as a mixed question of law and fact. Trial courts and the patent litigation bar would have clear notice of what is required to preserve claim construction arguments for appellate review. This Court already held in *Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241 (Fed. Cir. 2005) that arguing a claim construction position in a JMOL motion *might* preserve the issue, but has not yet followed *Ortiz* to hold that a litigant *must* do so to preserve it.

IV. The Nonprecedential Designation of the Panel Decision Has No Bearing on the Worthiness of This Case for *En Banc* Rehearing.

This case is both routine and exceptional. The panel decision is, according to Shepard's, the 753rd time this Court has cited *Cybor*. There is nothing remotely precedential about reviewing without deference all aspects of a trial court's claim construction. The panel correctly designated its decision as nonprecedential, since none of the fourteen exclusive reasons for making a decision precedential apply to this everyday application of *Cybor*. *See* Fed. Cir. Int. Op. Proc. 23-24.

Still, this routine case is an exceptionally good vehicle through which to revisit and overrule *Cybor* because of its facts and the presence of the waiver issue. In *Retractable Technologies*, the Solicitor General recommended denial of Supreme Court review, opining that the case was a poor vehicle through which to address the standard of review question because "the district court did not make any factual findings or resolve any evidentiary disputes in interpreting the patent claims at issue" in that case. *Retractable Technologies* U.S. Invitation Br. 8. According to the Solicitor General, a case that would properly present the standard of review question is one in which "a district court makes subsidiary factual findings in the course of construing a disputed patent claim." *Id.* at 21. The instant case presents that question.

The Court will recall that *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) involved a routine application of the teaching-suggestion-motivation test for

obviousness. At the Supreme Court, Teleflex opposed KSR's petition for *certiorari* on, *inter alia*, the ground that the Court's decision there was nonprecedential. Called by the Supreme Court for his views on the petition, the Solicitor General disagreed with Teleflex:

Respondents contend (Br. in Opp. 2, 17-19) that this case merely involves a routine application of summary judgment standards that does not warrant this Court's review. To the contrary, the case presents an important and recurring issue of basic importance in the field of patent law. The Federal Circuit's longstanding teaching-suggestion-motivation test has a substantial impact on commercial enterprise and innovation. See Cisco Systems Amicus Br. It also has been the subject of critical scholarly commentary. See Intellectual Property Law Professors Amicus Br.

KSR U.S. Invitation Br. 18, 127 S. Ct. 1727 (available at

http://www.justice.gov/osg/briefs/2005/2pet/6invit/2004-1350.pet.ami.inv.pdf).

Here, as in *KSR*, we have a recurring issue of basic importance: the standard of appellate review for trial court fact-finding incident to claim construction. *Cybor* has not merely been the subject of critical scholarly commentary – it is difficult to find any judge, IP bar association, commentator or anyone else with positive words for *Cybor*.

When, as is the case with *Cybor*, wrongly-decided precedent is in need of *en banc* correction, it makes no difference whether a panel decision is precedential. What matters is whether the facts of the case make it a suitable vehicle for reconsidering the applicable precedent. An important secondary consideration is

timing. The Solicitor General's description of an appropriate vehicle that would allow the Supreme Court to address the standard of review is a description that reads directly on the facts of this case. This might be the Court's final opportunity to revisit and overrule *Cybor*.⁵

CONCLUSION

The petition for rehearing *en banc* should be granted.

Dated: January 31, 2013

Robert P. Greenspoon FLACHSBART & GREENSPOON, LLC 333 North Michigan Avenue Chicago, Illinois 60601 (312) 551-9500

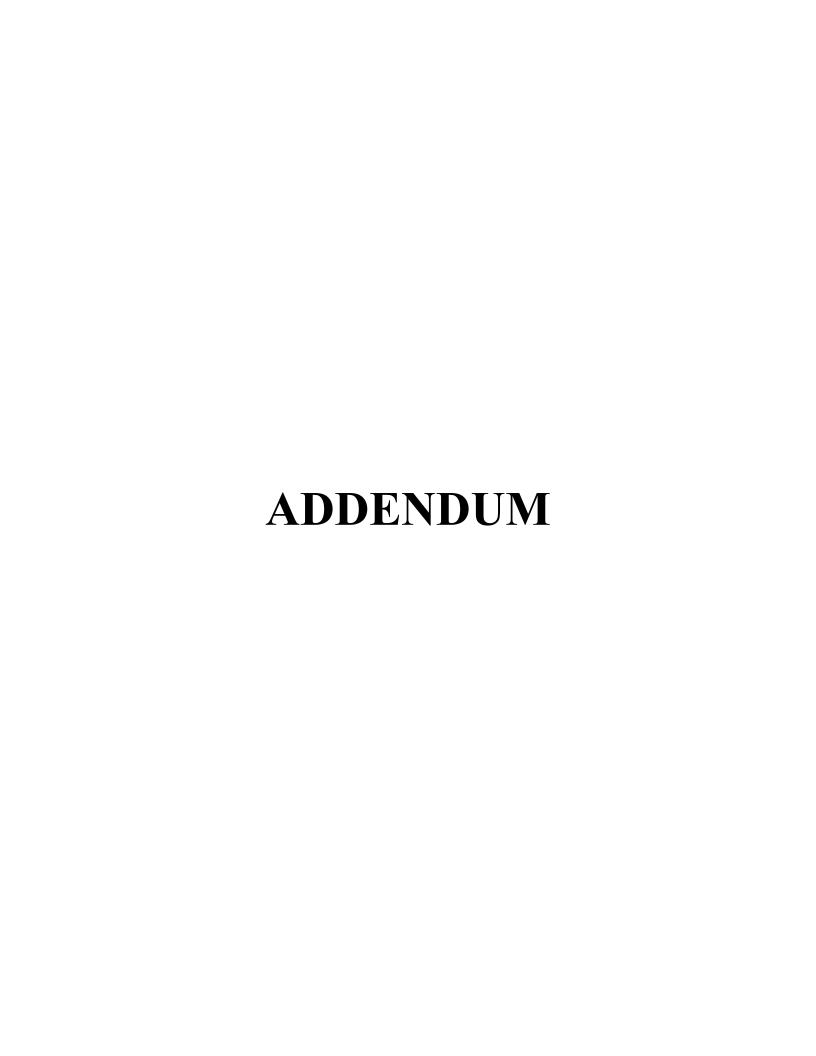
Jonathan T. Suder David A. Skeels FRIEDMAN, SUDER & COOKE 604 East 4th Street, Suite 200 Forth Worth, Texas 76102 (817) 334-0134

Andrew J. Dhuey 456 Boynton Avenue Berkeley, California 94707 (510) 528-8200

ATTORNEYS FOR PLAINTIFF-APPELLEE

⁻

⁵ The panel decision did not reach some of Universal's arguments for reversal. That fact does not change the analysis here: the compelling need to overrule *Cybor*, and the fact that this case is the right one for doing so. Any issues that remain after affirming the district court on indefiniteness may be addressed in the first instance by the same panel, or by the full Court if it so elects.



NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

LIGHTING BALLAST CONTROL LLC,

Plaintiff-Appellee,

 \mathbf{v} .

PHILIPS ELECTRONICS NORTH AMERICA CORPORATION,

Defendant,

AND

UNIVERSAL LIGHTING TECHNOLOGIES, INC.,

Defendant-Appellant.

2012-1014

Appeal from the United States District Court for the Northern District of Texas in case no. 09-CV-0029, Judge Reed O'Connor.

Decided: January 2, 2013

JONATHAN T. SUDER, Friedman, Suder & Cooke, of Fort Worth, Texas, argued for plaintiff-appellee. With him on the brief was ROBERT P. GREENSPOON, Flachsbart & Greenspoon, LLC, of Chicago, Illinois.

STEVEN J. ROUTH, Orrick, Herrington & Sutcliffe LLP, of Washington, DC, argued for defendant-appellant. With him on the brief were STEN A. JENSON, JOHN R. INGE, T. VANN PEARCE, JR., and DIANA M. SZEGO.

Before RADER, Chief Judge, O'MALLEY and REYNA, Circuit Judges.

REYNA, Circuit Judge

Lighting Ballast Control LLC ("Lighting Ballast") sued Universal Lighting Technologies, Inc. ("ULT") for infringement of U.S. Patent No. 5,436,529 (the '529 Patent). The patented technology relates to control and protection circuits for electronic lighting ballasts commonly used in fluorescent lighting. The district court construed the term "voltage source means" as a meansplus-function limitation under 35 U.S.C. § 112, ¶ 6. Lighting Ballast Control, LLC v. Philips Elecs. N. Am. Corp., 2010 U.S. Dist. LEXIS 127409, *26–41 (N.D. Tex. Dec. 2, 2010). Following a jury verdict in favor of Lighting Ballast, the district court entered final judgment of infringement and validity with respect to independent claim 1 and its dependent claims 2 and 5.

Because we find that the term "voltage source means" in the claims of the '529 Patent is a means-plus-function limitation under $\S 112$, $\P 6$, and because we find in the specification no corresponding structure, we hold the claims invalid for indefiniteness and reverse the judgment of the district court.

I. PATENTED TECHNOLOGY

High levels of electric current are required to start a fluorescent lamp. As a result, a fluorescent lamp fixture typically includes an electronic ballast to regulate current flow. The electronic ballast helps maintain a current level high enough to start the lamp while simultaneously preventing current from reaching destructive levels. When a lamp is removed from its holders or when a filament is broken, current provided by the ballast suddenly ceases to flow though the lamp and dissipates back into the ballast circuitry. The dissipating current can destroy the ballast and create an electric shock hazard for someone servicing the lamp.

The '529 Patent discloses an electronic ballast with a number of improvements over the prior art, including an ability to shield itself from destructive levels of current when a lamp is removed or becomes defective. '529 Patent col. 2 ll. 39–47. Claim 1 recites,

An energy conversion device employing an oscillating resonant converter producing oscillations, having DC input terminals producing a control signal and adapted to power at least one gas discharge lamp having heatable filaments, the device comprising:

voltage source means providing a constant or variable magnitude DC voltage between the DC input terminals;

output terminals connected to the filaments of the gas discharge lamp;

control means capable of receiving control signals from the DC input terminals and from the resonant converter, and operable to effectively initiate the oscillations, and to effectively stop the oscillations of the converter; and direct current blocking means coupled to the output terminals and operable to stop flow of the control signal from the DC input terminals, whenever at least one gas discharge lamp is removed from the output terminals or is defective.

Id. col. 11 ll. 49–68 (emphasis added). The "control means" and the "direct current blocking means" correspond generally to circuits designed to prevent current from dissipating into the ballast circuitry when a lamp is removed or defective. See, e.g., id. col. 7 l. 45 to col. 8 l. 45. These two elements appear to be central features of the invention. See Joint App. 8147 (applicant describing the "particular arrangement of control means and direct current blocking means" as a key feature in a Response to the PTO). The "voltage source means" provides the device with useable DC voltage. See id.

II. TRIAL PROCEEDINGS

On motion for summary judgment, ULT argued that "voltage source means" is a means-plus-function limitation and that the claims are invalid under 35 U.S.C. § 112, ¶ 2, because the specification fails to disclose any structure capable of providing DC voltage to the device. The district court initially agreed with ULT's assertion and found the asserted claims invalid for indefiniteness. Lighting Ballast Control, LLC v. Philips Elecs. North Am. Corp., 2010 U.S. Dist. LEXIS 85570, *29–31 (N.D. Tex. Aug. 19, 2010).

On motion for reconsideration, the district court reversed its indefiniteness decision because its initial construction of "voltage source means" "exalted form over substance and disregarded the knowledge of a person of ordinary skill in the art." Lighting Ballast Control, LLC v. Philips Elecs. N. Am. Corp., 2010 U.S. Dist. LEXIS 127409, at *38 (N.D. Tex. Dec. 2, 2010). The court cited testimony from an expert for Lighting Ballast, Dr. Roberts, and the inventor, Andrew Bobel, both of whom testified that one of skill in the art would understand the claimed "voltage source means" to correspond to a rectifier (which converts AC to DC) or other structure capable of supplying useable voltage to the device. The district court thus found that means-plus-function claiming did not

apply and construed the limitation according to its "ordinary meaning in the art." The court found that, according to the limitation's ordinary meaning, the claimed "voltage source means" corresponds to a class of structures: a rectifier for common applications in which the claimed device is used with an AC power line; and a battery or the like for less commonly used applications in which a DC power line is used.

ULT again moved for summary judgment, renewing its argument that the term "voltage source means" invokes means-plus-function claiming and is indefinite. The district court responded that it had "twice addressed this limitation" and declined "to address the same issue a third time." Joint App. 62. At the close of evidence, ULT moved for judgment as a matter of law ("JMOL") under FRCP 50(a), but did not continue to dispute the court's construction of "voltage source means." The court denied ULT's JMOL motion. The district court stated in its jury charge that the term "voltage source means" refers to "a rectifier." ULT did not object to this aspect of the jury charge. After the jury found claim 1 and its dependent claims 2 and 5 valid and infringed, ULT renewed its JMOL motion under FRCP 50(b) but did not press its argument regarding the court's construction of "voltage source means." The district court denied ULT's JMOL motion and entered final judgment in favor of Lighting Ballast.

ULT appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

III. WAIVER

We first address whether ULT waived the right to dispute the district court's construction of the term "voltage source means." Lighting Ballast argues that ULT waived its argument by failing to raise the argument in a JMOL motion during trial or in a renewed JMOL motion after the jury verdict, and by failing to object to the jury

instructions regarding the "voltage source means" limitation.

To determine whether a party waived a defense, we look to law of the applicable regional circuit, which in this case is the Fifth Circuit. See Ultra-Precision Mfg. v. Ford Motor Co., 411 F.3d 1369, 1376 (Fed. Cir. 2005). In the Fifth Circuit, "[i]t is a well-settled rule of law that an appeal from a final judgment raises all antecedent issues previously decided." Exxon Corp. v. St. Paul Fire & Marine Ins. Co., 129 F.3d 781, 784 (5th Cir. 1997). "[O]nce a final judgment is entered, all earlier non-final orders affecting that judgment may properly be appealed." Id. Thus, "a party may obtain review of prejudicial adverse interlocutory rulings upon his appeal from adverse final judgment, at which time the interlocutory rulings (nonreviewable until then) are regarded as merged into the final judgment terminating the action." Dickinson v. Auto Center Mfg. Co., 733 F.2d 1092, 1102 (5th Cir. 1983).

This is not a situation where a party has failed to raise an issue before the trial court that it seeks to have us review on appeal. ULT twice moved for summary judgment and argued its proposed construction of "voltage source means." In response to ULT's second motion for summary judgment, the district court denied the motion and ruled that it would not "address the issue a third time," at which point the dispute surrounding the "voltage source means" became fully litigated. The district court's final claim construction and indefiniteness ruling concerned only questions of law. See Biomedino, LLC v. Waters Techs. Corp., 490 F.3d 946, 949 (Fed. Cir. 2007) (noting that an indefiniteness determination, like claim construction, is a question of law). Thus, the district court's interlocutory ruling regarding the "voltage source means" merged into the final judgment terminating the action. See Dickinson, 733 F.2d at 1102.

Once ULT's position regarding the "voltage source means" was made clear to the district court, ULT was not required to renew its arguments during jury instructions. See O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1359 (Fed. Cir. 2008) ("When the claim construction is resolved pre-trial, and the patentee presented the same position in the [pre-trial] proceeding as is now pressed, a further objection to the district court's pre-trial ruling may indeed have been not only futile but unnecessary."). As a result, we find that ULT preserved its claim construction and indefiniteness argument with respect to "voltage source means" and that the issue is properly raised on appeal.

IV. MEANS-PLUS-FUNCTION CLAIMING

Means-plus-function limitations are governed by 35 U.S.C. § 112, ¶ 6, which allows a patentee to express a claimed element as a "means or step for performing a specified function without the recital of structure, material, or acts in support thereof." Such an element "shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." § 112, \P 6. The statute thus establishes a quid pro quo whereby a patentee may conveniently claim an element using a generic "means" for performing a function, provided the patentee's specification discloses structure capable of performing that function. Atmel Corp. v. Info. Storage Devices, Inc., 198 F.3d 1374, 1381 (Fed. Cir. 1999). Whether a claim limitation invokes means-plusfunction claiming under § 112, ¶ 6, is a matter of claim construction and therefore a question of law that we review without deference. See Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454–55 (Fed. Cir. 1998) (en banc).

Our first step in analyzing a means-plus-function limitation is to determine whether $\S 112$, $\P 6$, applies. *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 1361 (Fed. Cir. 2000). We start by considering whether

the limitation includes the word "means," "as the terms 'means' and 'means for' have become closely associated with means-plus-function claiming." Inventio AG v. Thyssenkrupp Elevator Ams. Corp., 649 F.3d 1350, 1356 (Fed. Cir. 2011). The word "means" triggers a presumption that "the inventor used this term advisedly to invoke [means-plus-function claiming]." York Prods., Inc. v. Central Tractor, 99 F.3d 1568, 1574 (Fed. Cir. 1996) (citation omitted).

The presumption triggered by use of the word "means" may be rebutted if the claim itself recites sufficient structure for performing the function. See Cole v. Kimberly-Clark Corp., 102 F.3d 524, 531 (Fed. Cir. 1996). In Cole, for example, we construed a claim directed to removable training pants for toddlers. 102 F.3d at 529. The claim recited a "perforation means extending from the leg band means to the waist band means through the outer impermeable layer means for tearing the outer impermeable layer means for removing the training brief in case of an accident by the user." Id. at 530. We held that the term "perforation means" did not invoke meansplus-function claiming because the claim described not only the structure for performing the tearing function ("perforation") but also the structure's location (extending from the leg band to the waist band) and extent (extending through the outer impermeable layer). Id. at 531. "An element with such a detailed recitation of its structure, as opposed to its function, cannot meet the requirements of [§ 112, \P 6]." *Id*.

By contrast, when a term only indicates what the recited means "does, not what it is structurally," the claim is properly construed under § 112, ¶ 6. Laitram Corp. v. Rexnord, Inc., 939 F.2d 1533, 1536 (Fed. Cir. 1991). For example, in Biomedino, we construed the phrase "control means for automatically operating said valving." 490 F.3d at 949. We held that the term "control" failed to convey sufficient structure to rebut the presumption that

means-plus-function claiming applied because "control' is simply an adjective describing 'means': it is not a structure or material capable of performing the identified function." *Id.* at 950.

Here, because claim 1 of the '529 Patent recites a "voltage source means," we start from the presumption that means-plus-function claiming under § 112, ¶ 6, The claim goes on to recite the corresponding function: "providing a constant or variable magnitude DC voltage between the DC input terminals." The term "voltage source" implies that voltage is provided, but the claim only sets out an indication of what the element "does, not what it is structurally." Laitram, 939 F.2d at The recited function implies no more structure than the term "voltage source" itself. While "DC input terminals" is a structural term, the input terminals receive rather than provide DC voltage. Thus, the claim does not contain structural language that is sufficient to remove "voltage source means" from the reach of § 112, ¶ 6.

In some circumstances, expert testimony may be probative of whether a claim term itself corresponds to sufficiently definite structure. In *Rembrandt Data Techs., LP v. AOL*, for example, we relied on expert testimony to confirm that the terms "fractional rate encoding" and "trellis rate encoding" were commonly used in publications to identify *defined* algorithms (i.e., structure) known in the art. 641 F.3d 1331, 1340–41 (Fed. Cir. 2001). Because the terms were "self-descriptive," we held that the terms "fractional rate encoding means" and "trellis encoding means" were not governed by § 112, ¶ 6, notwithstanding the word "means." *Id.* at 1340–41.

Lighting Ballast relies on expert testimony to support its argument that "voltage source means" *implies* structure and, as a result, means-plus-function claiming does not apply. Dr. Roberts, Lighting Ballast's expert, testified that "[t]he 'voltage source' limitation connotes, or suggests, to me, and would connote to anyone skilled in the art, the structure of a rectifier..." because "the only way for a [l]ighting [b]allast to convert AC (from a 'power line source' such as a wall outlet or other similar AC power source in a home or office) into DC (for use at the 'DC supply voltage') is through a rectifier." Joint App. 21. Dr. Roberts also stated that a battery could be used as the "voltage source means" if a DC power source was used. *Id.* at 21–22.

Lighting Ballast's expert testimony suggests that some structure for performing the recited function is implied, but it does not cure the absence of structural language in the claim itself. Nor does the testimony establish that the term "voltage source" was used synonymously with a defined class of structures at the time the invention was made, unlike the testimony in *Rembrandt*. See id. at 1341. In fact, Lighting Ballast's record testimony suggests a lack of a defined class of structures. While a rectifier and a battery may be examples of structures that commonly perform the recited function, there are many other ways to provide DC voltage, including "generators" and "solar voltaic cells," as Lighting Ballast's expert admitted. Joint App. 1623.

Lighting Ballast points to case law in which this Court declined to apply means-plus-function claiming in view of expert testimony and other extrinsic evidence showing that certain claimed elements implied sufficient structure. In those cases, however, we started from the presumption that means-plus-function claiming did not apply because the claim limitations at issue did not include the word "means." See MIT v. Abacus Software, 462 F.3d 1344, 1353 (Fed. Cir. 2006) ("The phrase 'colorant selection mechanism' is presumptively not subject to 112 ¶ 6 because it does not contain the term 'means."); Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1359 (Fed. Cir. 2004) ("Because the 'connector

assembly' limitation does not contain the term 'means,' we begin with the presumption that section $112~\P$ 6 does not apply to that limitation."); *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1372 (Fed. Cir. 2003) ("As an initial matter, none of the claim limitations asserted by Raritan to be means-plus-function limitations contains the term 'means,' which, as noted, is central to the analysis."); *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996) (construing the term "detent mechanism"; "means" did not appear in the claim.). In this case, we start with the presumption that means-plus-function claiming does apply because the claim limitation includes the word "means." ULT failed to present sufficient evidence to overcome that presumption.

V. Indefiniteness

Once a court determines that a claim limitation invoked means-plus-function claiming under § 112, ¶ 6, construction of the limitation involves two steps. First, the court must identify the claimed function. *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1332 (Fed. Cir. 2006). Second, the court must identify the structure described in the specification that performs the claimed function. *Id.* Here, the parties do not dispute the district court's construction of the claimed function. The sole issue on appeal is whether the specification identifies sufficient structure to support the claimed function. We review a district court's identification of the structure corresponding to a means-plus-function limitation without deference. *JVW Enters., Inc. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1329 (Fed. Cir. 2005).

A patentee may use a generic "means" expression to describe a claim element, but "the applicant must indicate in the specification what structure constitutes the means." *Biomedino*, 490 F.3d at 948. A patent must point out and distinctly claim the invention. *In re Donaldson Co.*, 16 F.3d 1189, 1195 (Fed. Cir. 1994) (en

banc). Failure to disclose adequate structure to support a generic "means" expression amounts to impermissible functional claiming. *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1211 (Fed. Cir. 2003). If the patentee fails to disclose adequate structure, the claim is invalid as indefinite under 35 U.S.C. § 112, \P 2. *See In re Donaldson*, 16 F.3d at 1195.

We hold that the '529 Patent fails to disclose structure capable of "providing a constant or variable magnitude DC voltage between the DC input terminals." The specification does not refer to a rectifier or any other structure capable of converting AC supply voltage into useable DC voltage. Nor does the specification disclose structure capable of supplying useable DC voltage directly from a DC supply voltage. Rather, the '529 Patent mentions drawing power from a power line source and DC supply voltages without specifying a capable structure or class of structures. See, e.g., '529 Patent col. 1 l. 56, col. 2 l. 8, col. 3 ll. 6–7.

As already noted, Lighting Ballast relies on expert testimony to support its contention that one skilled in the art would readily ascertain structures capable of performing the recited function. But "testimony of one of ordinary skill in the art cannot supplant the total absence of structure from the specification." Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc., 412 F.3d 1291, 1302 Lighting Ballast's testimony merely (Fed. Cir. 2005). demonstrates that several different structures could perform the recited function, namely, a rectifier, battery, solar cell, or generator. The possibility that an ordinarily skilled artisan could find a structure that would work does not satisfy the disclosure requirements of meansplus-function claiming under § 112. Ergo Licensing, LLC v. CareFusion 303, Inc., 673 F.3d 1361, 1363-64 (Fed. Cir. 2012); see also Blackboard, Inc. v. Desire2Learn Inc., 574 F.3d 1371, 1385 (Fed. Cir. 2009) ("That ordinary skilled" artisans could carry out the recited function in a variety of ways is precisely why claims written in 'mean-plusfunction' form must disclose the particular structure that is used to perform the recited function.").

Because we hold that the term "voltage source means" in claim 1 of the '529 Patent invokes means-plus-function claiming under § 112, ¶ 6, and because we find in the specification no corresponding structure, we find the asserted claims invalid for indefiniteness under § 112, ¶ 2. We need not address the other issues raised by ULT. The judgment below is

REVERSED

Costs

Each party shall bear its own costs.

CERTIFICATE OF SERVICE

I, Rose E. Olvera, being duly sworn according to law and being over the age of 18, upon my oath deposes and states that:

Counsel Press was retained by Flachsbart & Greenspoon, LLC, Attorneys for Defendant-Appellee, to print this document. I am an employee of Counsel Press.

On January 31, 2013, Flachsbart & Greenspoon authorized me to send an original and 18 copies of the Petition for Rehearing *En Banc* for filing to the Clerk of the Federal Circuit via prepaid Federal Express, overnight priority mail. In addition, two copies were sent also via prepaid Federal Express, overnight priority mail, to the following attorneys:

Steven J. Routh
John Randolph Inge
Sten A. Jensen
Timothy Vann Pearce, Jr.
Diana M. Szego
ORRICK, HERRINGTON & SUTCLIFFE LLP
Columbia Center
1152 15th Street, NW
Washington, DC 20005

January 31, 2013.	
•	Rose E. Olvera, Counsel Press