

No. 14-____

In the
Supreme Court of the United States

GOOGLE INC.,

PETITIONER,

v.

VEDERI, LLC,

RESPONDENT.

**On Petition for a Writ of Certiorari to
the United States Court of Appeals
for the Federal Circuit**

PETITION FOR WRIT OF CERTIORARI

ADAM M. CONRAD
KING & SPALDING LLP
100 N Tryon St., Suite 3900
Charlotte, NC 28202
(704) 503-2600

DARYL L. JOSEFFER
Counsel of Record
ASHLEY C. PARRISH
KAREN SCHOEN
KING & SPALDING LLP
1700 Pennsylvania Ave., NW
Washington, DC 20006
(202) 737-0500
djoeffe@kslaw.com

Counsel for Petitioner

October 16, 2014

QUESTION PRESENTED

When an applicant for a patent amends a claim to overcome the Patent and Trademark Office's earlier disallowance of the claim, should a court (i) presume that the amendment narrowed the claim and strictly construe the amended claim language against the applicant, as this Court has held; or (ii) presume that the claim scope remained the same and require that any narrowing be clear and unmistakable, as the Federal Circuit has held?

**PARTIES TO THE PROCEEDING
AND RULE 29.6 STATEMENT**

Petitioner in this Court, defendant-appellee below, is Google Inc. Respondent in this Court, plaintiff-appellant below, is Vederi, LLC.

Google Inc. is a publicly traded company (NASDAQ: GOOG and GOOGL). No publicly held company owns 10 percent or more of its stock.

TABLE OF CONTENTS

QUESTION PRESENTED	i
PARTIES TO THE PROCEEDING	
AND RULE 29.6 STATEMENT	ii
TABLE OF AUTHORITIES	vi
PETITION FOR WRIT OF CERTIORARI	1
OPINIONS BELOW	4
JURISDICTION	4
STATEMENT OF THE CASE	4
A. The Patent-Examination Process	4
B. Google Street View	6
C. Vederi And Its Patents.....	7
D. This Litigation.....	9
REASONS FOR GRANTING THE PETITION.....	13
I. The Federal Circuit’s Presumption That	
Amendments Made To Overcome Rejection	
Do <i>Not</i> Narrow Claim Scope Is In Square	
Conflict With This Court’s Precedents.	14
A. This Court has held that courts must	
strictly construe claim amendments	
made to obtain a patent.	14
B. The Federal Circuit has held that	
amendments made to overcome rejection	
narrow claim scope only if, and only to	
the extent that, they clearly and	
unmistakably do so.....	16

C. The Federal Circuit’s departure from this Court’s claim-construction standard vitiates this Court’s related doctrine-of-equivalents jurisprudence.....	20
II. This Issue Is Exceptionally Important.....	22
CONCLUSION	26
APPENDIX	
Appendix A	
Opinion of the United States Court of Appeals for the Federal Circuit (Mar. 14, 2014).....	App-1
Appendix B	
Excerpts of Transcript of Proceedings: Oral Claim-Construction Ruling of the United States District Court for the Central District of California (Nov. 22, 2011).....	App-17
Appendix C	
Opinion of the United States District Court for the Central District of California (Sept. 26, 2012)	App-32
Appendix D	
Judgment of the United States District Court for the Central District of California (Oct. 5, 2012)	App-39
Appendix E	
Amended Judgment of the United States District Court for the Central District of California (Feb. 27, 2013)	App-40

Appendix F

Order Denying Rehearing and Rehearing <i>En Banc</i> of the United States Court of Appeals for the Federal Circuit (June 18, 2014)	App-42
---	--------

TABLE OF AUTHORITIES

Cases

<i>3M Innovative Props. Co. v. Tredegar Corp.</i> , 725 F.3d 1315 (Fed. Cir. 2013)	16, 19
<i>Amgen Inc. v. Hoechst Marion Roussel, Inc.</i> , 314 F.3d 1313 (Fed. Cir. 2003)	17
<i>Bd. of Regents of the Univ. of Tex. Sys. v.</i> <i>BENQ Am. Corp.</i> , 533 F.3d 1362 (Fed. Cir. 2008)	17
<i>Conoco, Inc. v. Energy & Envtl. Int’l, L.C.</i> , 460 F.3d 1349 (Fed. Cir. 2006)	21
<i>Enzo Biochem, Inc. v. Applera Corp.</i> , 605 F.3d 1347 (Fed. Cir. 2010)	22
<i>Exhibit Supply Co. v. Ace Patents Corp.</i> , 315 U.S. 126 (1942)	1, 14, 15
<i>Festo Corp. v.</i> <i>Shoketsu Kinzoku Kogyo Kabushiki Co.</i> , 535 U.S. 722 (2002)	passim
<i>Golight, Inc. v. Wal-Mart Stores, Inc.</i> , 355 F.3d 1327 (Fed. Cir. 2004)	16
<i>Hubbell v. United States</i> , 179 U.S. 77 (1900)	13, 14, 15
<i>I.T.S. Rubber Co. v. Essex Rubber Co.</i> , 272 U.S. 429 (1926)	14, 21
<i>Invitrogen Corp. v. Biocrest Mfg., L.P.</i> , 327 F.3d 1364 (Fed. Cir. 2003)	12
<i>Jansen v. Rexall Sundown, Inc.</i> , 342 F.3d 1329 (Fed. Cir. 2003)	17

<i>Keystone Driller Co. v. Nw. Eng'g Corp.</i> , 294 U.S. 42 (1935).....	14, 15
<i>Kumar v. Ovonic Battery Co.</i> , 351 F.3d 1364 (Fed. Cir. 2003)	16, 17
<i>Markman v. Westview Instruments, Inc.</i> , 517 U.S. 370 (1996).....	5
<i>Morgan Envelope Co. v.</i> <i>Albany Perforated Wrapping Paper Co.</i> , 152 U.S. 425 (1894).....	16
<i>Nautilus, Inc. v. Biosig Instruments, Inc.</i> , 134 S. Ct. 2120 (2014).....	19, 23, 25
<i>Omega Eng'g, Inc. v. Raytek Corp.</i> , 334 F.3d 1314 (Fed. Cir. 2003)	17
<i>Paragon Solutions, LLC v. Timex Corp.</i> , 566 F.3d 1075 (Fed. Cir. 2009)	16
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005) (en banc)	6, 23
<i>Schindler Elevator Corp. v. Otis Elevator Corp.</i> , 593 F.3d 1275 (Fed. Cir. 2010)	16
<i>Schriber-Schroth Co. v. Cleveland Trust Co.</i> , 311 U.S. 211 (1940).....	16
<i>Smith v. Magic City Kennel Club, Inc.</i> , 282 U.S. 784 (1931).....	14, 15
<i>Teva Pharms. USA, Inc. v. Sandoz, Inc.</i> , No. 13-854 (U.S.).....	25
<i>W.E. Hall Co. v. Atlanta Corrugating, LLC</i> , 370 F.3d 1343 (Fed. Cir. 2004)	17

<i>Warner-Jenkinson Co. v. Hilton Davis Chem. Co.</i> , 520 U.S. 17 (1997)	20, 25
---	--------

<i>Weber Electric Co. v. E.H. Freeman Electric Co.</i> , 256 U.S. 668 (1921)	21
---	----

Statutes

28 U.S.C. § 1254	4
35 U.S.C. § 101	4
35 U.S.C. § 102	4
35 U.S.C. § 103	4
35 U.S.C. § 112	4, 5
35 U.S.C. § 131	4
35 U.S.C. § 132	5
35 U.S.C. § 134	5

Rules & Regulations

37 C.F.R. § 1.104	5
37 C.F.R. § 1.111	5
S. Ct. R. 10	13

Other Authorities

Besson, James & Meurer, Michael J., <i>The Direct Costs from NPE Disputes</i> , 99 Cornell L. Rev. 387 (2014)	25
Burk, Dan L. & Lemley, Mark A., <i>Quantum Patent Mechanics</i> , 9 Lewis & Clark L. Rev. 29 (2005)	19

Cotropia, Christopher A., <i>Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms</i> , 47 Wm. & Mary L. Rev. 49 (2005)	25
Curl, James Stevens, <i>A Dictionary of Architecture</i> (1999)	8
Federal Trade Commission, <i>The Evolving IP Marketplace</i> (Mar. 2011)	24
Harris, Cyril M., <i>American Architecture: An Illustrated Encyclopedia</i> (1998)	8
Leslie, Christopher R., <i>The Anticompetitive Effects of Unenforced Invalid Patents</i> , 91 Minn. L. Rev. 101 (2006)	22
Miller, Todd R., <i>The “Doctrine of Prosecution Disclaimer” in Construing Patent Claims</i> , 86 J. Pat. & Trademark Off. Soc’y 931 (2004)	24
Mills III, John Gladstone et al., <i>Patent Law Fundamentals</i> (2d ed. 2014)	6
Reilly, Greg, <i>Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard</i> , 20 Mich. Telecomms. & Tech. L. Rev. 243 (2014)	5, 6, 22, 25
U.S. Department of Commerce, <i>Patent Reform: Unleashing Innovation, Promoting Economic Growth & Producing High-Paying Jobs</i> (2010)	22

U.S. Patent and Trademark Office, <i>Manual of Patent Examining Procedure</i> (9th ed. Mar. 2014).....	4
U.S. Patent No. 6,140,943 (filed Aug. 12, 1999).....	8
U.S. Patent No. 7,239,760 (filed May 16, 2005)	7

PETITION FOR WRIT OF CERTIORARI

Because patents confer exclusive property rights, the integrity of the process by which the Patent and Trademark Office (“PTO”) examines and grants patent applications is exceptionally important. During that process, a patent examiner may determine that a claim is not patentable because, for example, it was anticipated by prior inventions or obvious in light of the background knowledge of persons skilled in the art. In that common situation, a patent applicant may either appeal the denial or amend the claim to “overcome” the examiner’s reasons for rejecting the claim. For example, an examiner might reject a broad claim to a camera because cameras were well known, but later allow a narrower, amended claim limited to a new, specific type of camera (such as the first infrared camera).

As this Court has repeatedly held, that process is not supposed to be a charade. When an applicant overcomes a rejection by amending a claim, something important has happened—the applicant has secured a government-granted property right by narrowing the claim. The amendment therefore “operates as a disclaimer” and “must be strictly construed against [the applicant]” and in favor of the public. *Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126, 137 (1942). By striking a phrase and replacing it with another to overcome the rejection, the applicant “recognize[s] and emphasize[s] the difference between the two phrases and proclaim[s] his abandonment of all that is embraced in that difference.” *Id.* at 136.

The Federal Circuit has turned that holding on its head. Instead of presuming that such amendments are narrowing, the Federal Circuit presumes that they do *not* narrow the original claim scope. In that court’s view, an amendment disclaims the earlier claim scope only if, and only to the extent that, it clearly and unmistakably does so. *See, e.g.*, App. 15. In other words, instead of strictly construing amended claim language against the drafter and in favor of the public, the Federal Circuit construes it in favor of the drafter by seeking clear and unmistakable evidence of an intent to narrow the claim.

In addition to conflicting with this Court’s claim-construction precedent, that standard vitiates this Court’s doctrine-of-equivalents jurisprudence. In limited circumstances, that doctrine expands a patent claim’s effective scope to include “equivalents.” When a patentee has amended a claim to secure allowance, however, “courts may presume . . . that the territory surrendered is *not* an equivalent of the territory claimed.” *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 741 (2002) (emphasis added). That limitation on the doctrine of equivalents presupposes that the amendment has limited the claim scope and that the question is whether to reinstate some of the surrendered scope through equivalents. By adopting the opposite presumption, that amendments do not limit claim scope, the Federal Circuit reads claims more broadly than would be permitted even under the doctrine of equivalents—an untenable result, given that the doctrine of equivalents exists to broaden the effective claim scope.

The stark conflict between decisions of this Court and the Federal Circuit—with the Federal Circuit holding the exact opposite of what this Court has held—is reason enough to grant review. The question’s importance is another reason. To preserve the integrity of the examination process, courts must enforce the conditions on which patents are granted and take care not to read claims more broadly than the examiner did when allowing them. “Were it otherwise, the inventor might avoid the PTO’s gatekeeping role and seek to recapture in an infringement action the very subject matter surrendered as a condition of receiving the patent.” *Id.* at 734.

That is what happened here. In response to an examiner’s rejection, the patent applicants narrowed the proposed claims. In court, however, respondent argued that “there was no clear and unambiguous surrender” of claim scope (*e.g.*, C.A. App. 2183), and the Federal Circuit agreed. That is the opposite of strict construction.

A rule that permits patentees to say one thing before the PTO and another during litigation disservices the public and undermines the integrity of the PTO’s examination process. This Court should grant certiorari or, at a minimum, call for the views of the Solicitor General on this important question.

OPINIONS BELOW

The opinion of the United States Court of Appeals for the Federal Circuit is published at 744 F.3d 1376 and reproduced at App. 1. The court's order denying rehearing is reproduced at App. 42. The district court's opinion granting summary judgment is reproduced at App. 32. The relevant excerpts of the district court's oral claim-construction ruling are reproduced at App. 17.

JURISDICTION

The court of appeals issued its opinion on March 14, 2014, *see* App. 1, and denied a timely petition for rehearing on June 18, 2014, *see* App. 42. On August 25, 2014, the Chief Justice extended the time for filing a petition for a writ of certiorari to and including October 16, 2014. This Court has jurisdiction under 28 U.S.C. § 1254(1).

STATEMENT OF THE CASE

A. The Patent-Examination Process

A PTO examiner reviews a patent application to determine whether it meets the criteria for patentability. *See* 35 U.S.C. § 131; *see also, e.g., id.* §§ 101, 102, 103, 112. An application consists of a “specification” that describes, among other things, the claimed invention, how it works, and related inventions and learning that preceded the filing of the patent application. *See* U.S. Patent & Trademark Office, *Manual of Patent Examining Procedure* §§ 601, 608.01 (9th ed. Mar. 2014), *available at* <http://mpep.uspto.gov/RDMS/detail/>

manual/MPEP/current/d0e18.xml; *see also* 35 U.S.C. § 112. The specification must also conclude with “one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor . . . regards as the invention.” 35 U.S.C. § 112(b). The claims define the scope of the asserted property right by marking its boundaries. *See Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372–74 (1996).

If an examiner determines that claims fail to satisfy one or more of the requirements for patentability, the examiner issues an “office action” rejecting the claims. *See* 37 C.F.R. § 1.104; Greg Reilly, *Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard*, 20 Mich. Telecomms. & Tech. L. Rev. 243, 255–56 (2014). In response, the applicant may: amend the proposed claims; “present arguments pointing out the specific distinctions believed to render the claims . . . patentable over any applied references” (*i.e.*, the prior art), 37 C.F.R. § 1.111(b); or appeal the rejection, *see* 35 U.S.C. § 134.

Because applicants routinely amend claims to overcome rejection, the issued claims are often narrower than the original claims. *See* Reilly, 20 Mich. Telecomms. & Tech. L. Rev. at 256. Applicants typically do not amend the specification’s description of the invention, however, in part because of legal limits on their ability to do so. *See id.*¹ Thus, the

¹ The Patent Act prohibits changes to a patent’s specification that would introduce “new matter.” 35 U.S.C. § 132(a); *see also* Reilly, 20 Mich. Telecomms. & Tech. L. Rev. at 256. This new-matter prohibition preserves the integrity of a

specification generally describes the claims before, not after, any amendment.

The record of the examination, also known as the prosecution history, becomes part of the public record for an issued patent. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005) (en banc); Reilly, 20 Mich. Telecomms. & Tech. L. Rev. at 256. The PTO makes the prosecution history available via its website, at <http://portal.uspto.gov/pair/PublicPair>.

B. Google Street View

Google is a leading innovator of high-technology software and services. Its accused product—Street View—enables individuals to view and navigate through images of city streets, parks, and other attractions. To create the images for Street View, Google operates vehicles that carry as many as fifteen cameras pointing in different directions. *See* App. 6; C.A. App. 2567. The cameras take overlapping pictures of the surrounding area at approximately the same time. *See* App. 6.

Using complex algorithms, Google “stitches” the images together to create a spherical panorama of the scene that provides a virtual depiction of what the scene would look like if the user were actually there. *See id.* Users may shift the viewing angle 360 degrees in any direction, including up or down, and look around a given location as if they were standing

patent’s filing date by limiting applicants to the information they possessed, as demonstrated by their disclosure in the specification, at the time of the original filing. *See* 4 John Gladstone Mills III et al., *Patent Law Fundamentals* § 15:23, at 15-204.3 (2d ed. 2014).

at the center of a sphere. *See* App. 7. Such spherical views are perspective accurate, *i.e.*, objects farther away in the scene appear smaller. *See* C.A. App. 3211.

C. Vederi And Its Patents

1. Respondent Vederi, LLC owns the four patents at issue. Those patents share a common specification, which describes a system and method for allowing a user “to visually navigate [an] area from a user terminal.” U.S. Patent No. 7,239,760, at 2:47–48 (filed May 16, 2005). The specification explains that virtual navigation was a crowded field by the time of the patent application. *See id.* at 1:23–45. Prior-art methods included collecting images by driving through a location and then creating databases of the images. *Id.* at 1:38–43.

Claim 1 of U.S. Patent No. 7,239,760 is representative of the asserted claims. It recites in relevant part “a plurality of images depicting views of objects in the geographic area, the views being substantially elevations of the objects in the geographic area” *Id.* at 15:65–67. The parties disputed the meaning of that phrase, specifically the words “substantially elevations.”

The patents’ specification does not use the phrase “substantially elevations.” The parties agree, however, that the patent applicants borrowed the term “elevations” from the field of architecture. *See* C.A. App. 24. In that field, an “elevation” is a projection of a building or other object “onto a vertical plane”—essentially what one would expect to see in an architectural blueprint. Cyril M. Harris,

American Architecture: An Illustrated Encyclopedia 144 (1998) (C.A. App. 1744). Unlike curved or spherical views, such flat views lack perspective; it is as if the viewer were simultaneously positioned directly across from every point on the depicted object (*i.e.*, at a 90-degree angle to the vertical plane). *See id.*; James Stevens Curl, *A Dictionary of Architecture* 224 (1999) (C.A. App. 1748).

2. The phrase “substantially elevations” first appeared in an amendment to the claims. The applicants had initially proposed broad claims reciting, among other things, “images providing a non-aerial view of the objects.” C.A. App. 404. An aerial view is an above-ground view looking down, such as a map or satellite image; non-aerial views, in contrast, include street-level views of buildings and objects. The examiner rejected the original claims as anticipated by a prior-art method disclosed in the “Levine” patent, U.S. Patent No. 6,140,943. *See* C.A. App. 471. Levine described a navigation system that provided aerial views (maps) as well as “non-aerial” views of objects and buildings. *See* U.S. Patent No. 6,140,943, at 1:27–32 (filed Aug. 12, 1999); C.A. App. 471.

The applicants amended their claims to overcome the examiner’s rejection. Because Levine disclosed the use of images with non-aerial views of objects and buildings, the applicants replaced the claim element referring to “images providing a non-aerial view of the objects” with another claim element that refers to “images depicting views . . . , the views being substantially elevations.” C.A. App. 494.

In remarks accompanying the amendment, the applicants argued that “none of the images in Levine depict views that are ‘substantially elevations of the objects in the geographic area.’” C.A. App. 504. They further argued that Levine disclosed only maps. C.A. App. 503–04. The examiner allowed the amended claims based on the “substantially elevations” limitation. C.A. App. 525. The applicants did not amend the patents’ specification to reflect that amendment.

D. This Litigation

1. In the district court, the parties disputed the meaning of several terms used in the patent claims, including “substantially elevations.” Google and Vederi agreed that “substantially elevations” refers to front, back, and side views of objects, but disagreed over whether those views must be vertically flat or may also be curved or spherical. *See* App. 7–8.

Google proposed to construe the term “depicting views . . . , the views being substantially elevations” to mean “vertical flat (as opposed to curved or spherical) depictions of front, back, or side views.” C.A. App. 1703. Google relied on, among other things, the meaning of “elevation” in the field of architecture, *see* C.A. App. 1728, and the applicants’ use of “this term to distinguish over prior art,” C.A. App. 1703.

Vederi responded that the term means “front, back, or side views,” without limitation. C.A. App. 2102. Vederi argued, among other things, that “there was no clear and unambiguous surrender” of claim scope during examination because the

applicants “did not need to add the phrase ‘substantially elevations’ to overcome the prior art.” C.A. App. 2183.

Sitting by designation, Chief Judge Alex Kozinski of the United States Court of Appeals for the Ninth Circuit agreed with Google. Noting that the ordinary meaning of “elevation” is “flat images,” App. 20, and that the patents do not “disclose[] anything about spherical views,” the court adopted Google’s proposed construction, App. 31. The parties agreed to a minor modification of that construction: deleting its reference to “back” views because, in the patented invention, a camera would never capture a back view of a building or other object. *See* App. 18–19, 31.

Based on its construction of “substantially elevations,” the district court granted Google’s motion for summary judgment of non-infringement. *See* App. 38. The court concluded that, because Street View displays only curved or spherical (perspective) views, “it doesn’t contain the ‘substantially elevations’ limitation, and so doesn’t literally infringe Vederi’s patents.” App. 37. The court also rejected Vederi’s attempt to recapture spherical images through the doctrine of equivalents, which allows patentees to assert, in limited circumstances, exclusive rights to “equivalents” of the patented invention. The court determined that finding infringement by equivalents would “vitiate the claim construction” by “eliminat[ing] the ‘vertical flat (as opposed to curved or spherical)’ portion of the ‘substantially elevations’ construction [and] leaving only ‘depictions of front or side views.’” App. 38.

2. The court of appeals reversed the district court's claim construction and vacated its judgment of non-infringement. *See* App. 16. The court acknowledged that “elevation” is an architectural term, but concluded that the district court had “effectively read[] ‘substantially’ out [of] the claims.” App. 11. Google had argued that the term “substantially” in “substantially elevations” reflects the practical reality that a photograph cannot depict a true elevation because the camera lens would have to be as tall as the object (*i.e.*, a building) being photographed in order to create a completely flat view. App. 12. The Federal Circuit concluded, however, that “‘substantially’ has no independent operative effect” under the district court's construction—“other than to account for the specification's disclosure of cameras as a means for capturing images.” *Id.* The Federal Circuit did not explain why, in its view, accounting for the practical realities of image capture did not give “independent operative effect” to the term “substantially.”

The applicants' amendment of the claims to replace “non-aerial views” with “substantially elevations” did not affect the court of appeals' view of the correct claim construction. *See* App. 15–16. Google had argued that the applicants' decision to replace “non-aerial views” with “substantially elevations” confirms that “substantially elevations” does not refer to all front, back, and side views; that would cause “substantially elevations” and “non-aerial views” to mean effectively the same thing, as there are no other non-aerial views in the context of the claimed invention. *See, e.g.*, Google C.A. Br. 30–31. The Federal Circuit, however, “discern[ed] no

clear and unambiguous disavowal of spherical or curved images that would support the district court's construction." App. 15 (citing *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1369 (Fed. Cir. 2003)). The court did not identify any difference between its construction of the amended claim term ("substantially elevations") and the original term ("non-aerial views").

The court of appeals also noted a brief reference in the specification to the use of a "fish-eye lens," which, that court opined, produces "a curved, as opposed to vertical, projection, and almost certainly reflects curvature and perspective." App. 12. The court rejected any interpretation that "would not allow the claims to cover the fish-eye lens embodiment" in the specification—a specification drafted *before* the applicants amended the claims to limit them to "substantially elevations." *Id.*

For those reasons, the Federal Circuit construed "substantially elevations" to refer to all "front and side views" of objects, including "curved or spherical images." App. 16. The court of appeals denied rehearing *en banc*. App. 43.

REASONS FOR GRANTING THE PETITION

Certiorari is appropriate when “a United States court of appeals . . . has decided an important federal question in a way that conflicts with relevant decisions of this Court.” S. Ct. R. 10(c). Although true conflicts with this Court’s decisions are unusual, the conflict here is undeniable.

This Court has long held that claim amendments made to overcome a rejection by the PTO are presumptively narrowing and “must be strictly construed against the inventor and in favor of the public.” *Hubbell v. United States*, 179 U.S. 77, 84 (1900). The Federal Circuit, however, has adopted and repeatedly followed the opposite rule: that such an amendment presumptively does *not* narrow a claim’s scope, and any disclaimer of the original claim scope must be clear and unmistakable. *See, e.g.*, App. 15.

This conflict is exceptionally important because the Federal Circuit’s approach allows applicants to secure claims by narrowing them before the PTO, but then to turn around and assert the broader, original claim scope in court. Under the “clear and unmistakable” standard, an applicant can have it both ways by amending a claim to satisfy the examiner, but also creating a vague or ambiguous record concerning the intended effect of the amendment so that courts will presume the amendment had no effect on claim scope.

I. The Federal Circuit’s Presumption That Amendments Made To Overcome Rejection Do *Not* Narrow Claim Scope Is In Square Conflict With This Court’s Precedents.

A. This Court has held that courts must strictly construe claim amendments made to obtain a patent.

This Court’s decisions leave no doubt that when an applicant amends a claim to overcome the examiner’s rejection based on prior art, an amendment “operates as a disclaimer.” *Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126, 137 (1942); *accord Keystone Driller Co. v. Nw. Eng’g Corp.*, 294 U.S. 42, 48 (1935); *Smith v. Magic City Kennel Club, Inc.*, 282 U.S. 784, 789–90 (1931); *I.T.S. Rubber Co. v. Essex Rubber Co.*, 272 U.S. 429, 443–44 (1926); *Hubbell*, 179 U.S. at 84. By striking a phrase and replacing it with another to overcome the rejection, the applicant “recognize[s] and emphasize[s] the difference between the two phrases and proclaim[s] his abandonment of all that is embraced in that difference.” *Exhibit Supply*, 315 U.S. at 136.

If applicants believe that an examiner erred and that rejected claims are in fact patentable, they can appeal. *See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 734 (2002); *see also I.T.S. Rubber*, 272 U.S. at 443; *Hubbell*, 179 U.S. at 83. But a “decision to forgo an appeal and submit an amended claim is taken as a concession that the invention as patented does not reach as far as the original claim.” *Festo*, 535 U.S. at 734.

And because “the question is one of construction of the claim[,] it is immaterial whether the examiner was right or wrong in rejecting the claim as filed.” *Exhibit Supply*, 315 U.S. at 137. Where “broad claims are denied and a narrower substituted, the patentee is estopped to read the granted claim as the equivalent of those which were rejected.” *Keystone Driller*, 294 U.S. at 48.

To protect the integrity of the PTO’s examination process, moreover, the amendment “must be strictly construed against the inventor and in favor of the public.” *Hubbell*, 179 U.S. at 84; *accord Exhibit Supply*, 315 U.S. at 137; *Smith*, 282 U.S. at 790. “Were it otherwise,” this Court has explained, “the inventor might avoid the PTO’s gatekeeping role and seek to recapture in an infringement action the very subject matter surrendered as a condition of receiving the patent.” *Festo*, 535 U.S. at 734; *see also Smith*, 282 U.S. at 789. Specifically, after a patent examiner allows a claim based on one understanding of a narrowing amendment, a patentee might turn around and espouse a broader interpretation in litigation (as *Vederi* has done here). Strict construction ensures that courts do not construe claims more broadly than the examiner did in allowing them. *Keystone Driller*, 294 U.S. at 48.²

² Although it occurs less frequently, the Court applies the same rule of strict construction when an applicant surrendered a narrowly drawn claim and replaced it with a broader claim. In that circumstance, the patent holder is estopped from relying on the narrower construction to avoid invalidity (broader claims are more likely to encompass the prior art, and thus to be invalid). *See Schriber-Schroth Co. v. Cleveland Trust Co.*, 311

B. The Federal Circuit has held that amendments made to overcome rejection narrow claim scope only if, and only to the extent that, they clearly and unmistakably do so.

1. The Federal Circuit has turned this Court’s precedent on its head. It finds disclaimer only to the extent that a claim amendment “clearly and unmistakably” or “clearly and unambiguously” narrowed the claim (the court uses both formulations interchangeably). *See, e.g.*, App. 15; *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1325 (Fed. Cir. 2013); *Schindler Elevator Corp. v. Otis Elevator Corp.*, 593 F.3d 1275, 1285 (Fed. Cir. 2010); *Paragon Solutions, LLC v. Timex Corp.*, 566 F.3d 1075, 1085–86 (Fed. Cir. 2009). In other words, the Federal Circuit applies the opposite of strict construction, presuming that there was no disclaimer unless the applicant clearly and unmistakably manifested an intent to limit claim scope.

Thus, for example, if an amendment made to overcome disallowance could be construed in one of two ways, each of which is “equally consistent” with the interpretive evidence, the Federal Circuit presumes *no* disclaimer and chooses the broader interpretation. *Kumar v. Ovonic Battery Co.*, 351 F.3d 1364, 1371 (Fed. Cir. 2003); *see also Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1332 (Fed. Cir. 2004) (choosing broader of two “reasonable interpretations” of amended claim language). In

U.S. 211 (1940); *Morgan Envelope Co. v. Albany Perforated Wrapping Paper Co.*, 152 U.S. 425 (1894).

Kumar, the court of appeals deemed the record before the PTO “confusing” and held that “the surrender is not clear and convincing as required by our cases.” 351 F.3d at 1371 (citing *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323–25 (Fed. Cir. 2003)). Under strict construction, however, any confusion would be held against the applicant responsible for the claim amendment, not against the public.

The Federal Circuit has suggested on occasion that an amendment made to overcome rejection is entitled to “weight” and might suffice to demonstrate a clear disavowal. *Bd. of Regents of the Univ. of Tex. Sys. v. BENQ Am. Corp.*, 533 F.3d 1362, 1369 (Fed. Cir. 2008); *see also Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1327 (Fed. Cir. 2003); *Jansen v. Rexall Sundown, Inc.*, 342 F.3d 1329, 1333 (Fed. Cir. 2003). As explained above, however, the court has made clear that the amendment receives meaningful weight only to the extent that it clearly and unmistakably narrows the claim’s meaning. Indeed, the Federal Circuit has gone so far as to reject a narrower construction simply because the prosecution history was “not *necessarily* inconsistent with” a broader one. *W.E. Hall Co. v. Atlanta Corrugating, LLC*, 370 F.3d 1343, 1352 (Fed. Cir. 2004) (emphasis added).

2. In this case as well, the Federal Circuit failed to construe amended claim language strictly against the drafter, relying instead on the court’s contrary “clear and unmistakable” standard. As discussed above, the applicants replaced “non-aerial views” with “substantially elevations” in order to overcome the examiner’s reasons for disallowance. That

amendment significantly narrowed the claims. Instead of encompassing all non-aerial views, *i.e.*, all views that are not from above, an “elevation” refers to a specific kind of non-aerial view akin to a blueprint—a flat view without perspective. *See* pp. 7–8, *supra*.

The Federal Circuit nonetheless “discern[ed] no clear and unambiguous disavowal of spherical or curved images” and held that “substantially elevations” refers to all front or side views. App. 15–16. That undid the amendment because, in the context of the patented invention, all non-aerial views *are* front or side views. The patented method simply involves taking pictures of the fronts or sides of buildings or other objects along a street. Under the Federal Circuit’s construction, the term “elevation” covers all such views and therefore adds nothing beyond the original claim language. Indeed, the court identified no difference in claim scope between “non-aerial views” and its construction of “substantially elevations.”

The court of appeals noted a different argument the applicant had made to the examiner, that the Levine prior-art reference involved maps, and concluded that the applicants’ argument about maps did not clearly and unambiguously disclaim spherical and curved images. *See* App. 15. But whether the applicants’ *argument* about maps surrendered claim scope is beside the point. The *amendment* itself must be given effect. And because maps are by definition aerial views, that argument does not explain the amendment or demonstrate any difference between non-aerial views and front or side views.

Even if the court of appeals' construction of "substantially elevations" had somehow given the claim a slightly different meaning than it had before the amendment, the court still failed to strictly construe the amended language against Vederi and in favor of the public, as this Court's precedents require. Under this Court's strict-construction standard, the district court's construction is clearly the correct one. It is consistent with the ordinary meaning of "elevations" and it gives meaningful effect to the amendment. The court of appeals' broader construction is not.

3. Some judges and scholars have mused that the Federal Circuit should impose a rule of strict construction for claim language generally. *See, e.g., 3M Innovative Props.*, 725 F.3d at 1336 (Plager, J., concurring) ("ambiguity should be construed against the draftsman"); Dan L. Burk & Mark A. Lemley, *Quantum Patent Mechanics*, 9 Lewis & Clark L. Rev. 29, 54 (2005) (proposing "narrowly construing claims against the drafter"). That discussion of whether to start applying a strict-construction rule shows how far the Federal Circuit has drifted from this Court's precedents. A good place to start would be the strict-construction rule this Court already adopted for amendments made to overcome rejection.

As this Court recently emphasized, the Federal Circuit's legal standards must be "at least probative of the essential inquiry." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2130 (2014) (internal quotation marks omitted). Here, the Federal Circuit's standard misses the essential inquiry altogether by presuming that amendments

made to overcome disallowance do *not* narrow claim scope.

C. The Federal Circuit’s departure from this Court’s claim-construction standard vitiates this Court’s related doctrine-of-equivalents jurisprudence.

The Federal Circuit’s “clear and unmistakable” standard also conflicts with this Court’s doctrine-of-equivalents jurisprudence. If an accused product does not literally infringe a patent claim, it may sometimes be found to infringe under the doctrine of equivalents if the differences between the claim language and the accused product are insubstantial. *See Festo*, 535 U.S. at 731–32; *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21 (1997). That doctrine expands the effective claim scope by capturing accused products that do not infringe the claim language, but are only insubstantially different. *See Festo*, 535 U.S. at 731–32. When a patentee has chosen to amend a claim to secure allowance, however, the “courts may presume . . . that the territory surrendered is *not* an equivalent of the territory claimed.” *Id.* at 741 (emphasis added).

It necessarily follows that the amended claim language must be construed more narrowly than the original language. This Court’s limits on the doctrine of equivalents presuppose that the claim scope has been narrowed and the question is whether to effectively reinstate some of the surrendered claim scope through equivalents. *See, e.g., id.* at 733–41. If an amended claim is construed to have the same scope as the original claim, however, those limits are

evaded because the applicants receive through claim construction what they could not under the doctrine of equivalents—an untenable result, given that the whole point of the doctrine of equivalents is to broaden the effective claim scope.

Nonetheless, the Federal Circuit’s jurisprudence produces precisely that anomaly. For purposes of the doctrine of equivalents, the court of appeals “presume[s],” as this Court has instructed, “that the patentee surrendered all subject matter between the broader and the narrower language.” *Conoco, Inc. v. Energy & Envtl. Int’l, L.C.*, 460 F.3d 1349, 1364 (Fed. Cir. 2006) (quoting *Festo*, 535 U.S. at 740). If the exact same issue arises as a claim-construction dispute, however, the court finds no surrender unless the amendment is clear and unambiguous. *See* pp. 16–19, *supra*. Thus, although the Federal Circuit follows *Festo* when it comes to the doctrine of equivalents, it applies a standard for the threshold question of claim construction that could negate *Festo* altogether.

This Court has already rejected precisely that result. As the Court explained, an applicant who voluntarily chose to “narrow[] his claim in order to obtain a patent . . . may not *by construction, or by resort to the doctrine of equivalents*, give to the claim the larger scope which it might have had without the amendments, which amount to a disclaimer.” *I.T.S. Rubber*, 272 U.S. at 444 (emphasis added) (quoting *Weber Electric Co. v. E.H. Freeman Electric Co.*, 256 U.S. 668, 677–78 (1921)).

II. This Issue Is Exceptionally Important.

The Federal Circuit’s departure from this Court’s precedents is exceptionally important because it repeatedly gives overbroad interpretations to patent claims and undermines the integrity of the PTO’s patent-examination process.

1. Overbroad patent claims have become a plague, especially in the high-tech sector. *See, e.g., Enzo Biochem, Inc. v. Applera Corp.*, 605 F.3d 1347, 1349 (Fed. Cir. 2010) (Plager, J., dissenting from denial of panel reh’g). Such patents are a threat—not a boon—to innovation because they block and impair others from innovating. *See* U.S. Dep’t of Commerce, *Patent Reform: Unleashing Innovation, Promoting Economic Growth & Producing High-Paying Jobs* 1, 5 (2010), available at http://www.commerce.gov/sites/default/files/documents/migrated/Patent_Reform-paper.pdf; Christopher R. Leslie, *The Anticompetitive Effects of Unenforced Invalid Patents*, 91 Minn. L. Rev. 101, 113–29 (2006). If a patentee asserts overbroad claims to which it is not properly entitled, and then secures—or even threatens to secure—an injunction or damages award, the patentee can unfairly block or tax others’ innovation, driving up prices and decreasing the availability of innovative products and services to the public.

The problem is especially acute “when patentees exploit vagueness or ambiguities in claim language to broadly assert patents that were understood narrowly when issued by the Patent Office.” Reilly, 20 Mich. Telecomms. & Tech. L. Rev. at 246. The prosecution history should be a crucial check on such

abuse, available for the public not only to review but also to rely on. Indeed, the Federal Circuit has recognized that “the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005) (en banc). But the court’s “clear and unambiguous” standard precludes courts from giving proper effect to the prosecution history.

The prosecution history is especially important in cases, like this one, where the applicants added a new claim term during examination. Claim terms are generally construed in light of their ordinary meanings and the context provided by the specification and the prosecution history. *See Nautilus*, 134 S. Ct. at 2128. But applicants who make narrowing claim amendments during prosecution rarely make corresponding changes to the specification. *See* pp. 5–6, *supra*. Because the specification has limited value in construing a claim term added by amendment, the prosecution history generally provides the *best* contextual evidence for construing the term. But the Federal Circuit strongly presumes that the amendment history is not even relevant. The result is overbroad claim constructions.

In this case, for example, the court of appeals held that the claim language must be construed broadly enough to encompass the specification’s brief mention of fish-eye lenses (and any spherical images

produced by such lenses). *See* p. 12, *supra*; App. 12–13. But the applicants drafted the specification’s description of the claimed invention *before* the narrowing amendment, and the specification does not even use the word “elevations.” The court of appeals should have strictly construed that amendment—not undone it in deference to the specification’s description of the original, pre-amendment claims.

Scholars have noted “the relative ease in which one may find an ambiguity in the prosecution history so as to avoid prosecution disclaimer.” Todd R. Miller, *The “Doctrine of Prosecution Disclaimer” in Construing Patent Claims*, 86 J. Pat. & Trademark Off. Soc’y 931, 945 (2004). Applicants have every incentive to amend claims to placate an examiner while creating a vague or ambiguous record concerning the amendment—knowing that courts will resolve any doubts in favor of the applicant and against the public. That undermines the integrity of the PTO’s examination process by making examiners’ efforts to confine patent claims to actual innovation much more difficult, if not futile.

All of this plays into the hands of patent assertion entities. As the Federal Trade Commission found, such entities obtain “overbroad, vague claims” they might assert against a broad range of activity, wait for others to do the hard work of developing applications, and then sue the real innovators. *See* Fed. Trade Comm’n, *The Evolving IP Marketplace* 8–9, 50–51, 60–61 (Mar. 2011), *available at* <http://www.ftc.gov/os/2011/03/110307patentreport.pdf>. One study estimated that the direct costs of such suits totaled \$29 billion in 2011. James Besson & Michael

J. Meurer, *The Direct Costs from NPE Disputes*, 99 Cornell L. Rev. 387, 387 (2014). The public ultimately bears the cost in terms of reduced innovation and higher prices.

2. Because patent claims define the boundaries of government-granted property rights, the legal standards governing their interpretation have great practical consequences. Claim construction “is overwhelmingly the most critical patent issue in litigation.” Reilly, 20 Mich. Telecomms. & Tech. L. Rev. at 246 (internal quotation marks omitted). Whether a patent claim is valid, and whether a defendant infringed the patent, often depend in large part on the claim’s boundaries (*i.e.*, the scope of the exclusive right). As a result, claim construction is “often dispositive.” Christopher A. Cotropia, *Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms*, 47 Wm. & Mary L. Rev. 49, 67 (2005). In this case, for example, Chief Judge Kozinski granted summary judgment based on his construction of the claims.

This Court has recognized the importance of claim scope by granting review in recent years to decide a number of related issues, including the requirement that claim language be clear, *Nautilus*, 134 S. Ct. 2120; the standard of appellate review for claim construction, *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, No. 13-854, and the limits on the doctrine of equivalents, *Festo*, 535 U.S. 722; *Warner-Jenkinson*, 520 U.S. 17. Even apart from the clear conflict between the standards applied by this Court and the Federal Circuit, this case warrants review

for essentially the same reason those cases did: the importance of claim scope.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,

DARYL L. JOSEFFER

Counsel of Record

ASHLEY C. PARRISH

KAREN SCHOEN

KING & SPALDING LLP

1700 Pennsylvania Ave., NW

Washington, DC 20006

(202) 737-0500

djoseffer@kslaw.com

ADAM M. CONRAD

KING & SPALDING LLP

100 N Tryon St., Suite 3900

Charlotte, NC 28202

(704) 503-2600

Counsel for Petitioner

APPENDIX

TABLE OF APPENDICES

Appendix A

Opinion of the United States Court
of Appeals for the Federal Circuit
(Mar. 14, 2014)..... App-1

Appendix B

Excerpts of Transcript of
Proceedings: Oral Claim-
Construction Ruling of the United
States District Court for the Central
District of California (Nov. 22, 2011)..... App-17

Appendix C

Opinion of the United States District
Court for the Central District of
California (Sept. 26, 2012) App-32

Appendix D

Judgment of the United States
District Court for the Central
District of California (Oct. 5, 2012) App-39

Appendix E

Amended Judgment of the United
States District Court for the Central
District of California (Feb. 27, 2013) App-40

Appendix F

Order Denying Rehearing and Rehearing <i>En Banc</i> of the United States Court of Appeals for the Federal Circuit (June 18, 2014)	App-42
---	--------

App-1

Appendix A

**United States Court of Appeals
Federal Circuit**

VEDERI, LLC,
Plaintiff-Appellant,

v.

GOOGLE, INC.,
Defendant-Appellee.

2013-1057, -1296

Appeals from the United States District Court for the
Central District of California in No. 10-CV-7747,
Chief Judge Alex Kozinski of the United States Court
of Appeals for the Ninth Circuit, sitting by
designation.

Decided: March 14, 2014

* * *

Before RADER, *Chief Judge*, DYK and TARANTO,
 Circuit Judges.

RADER, *Chief Judge.*

The United States District Court for the Central
District of California entered summary judgment of
non-infringement in favor of Google, Inc. (Google)
and against Vederi, LLC (Vederi) on October 5, 2012.

App-2

Because the district court erred in its claim construction, this court vacates the judgment of non-infringement and remands for further proceedings.

I.

Vederi sued Google for patent infringement on October 15, 2010, alleging that Google’s “Street View” infringed various claims of four related patents: U.S. Patent Nos. 7,239,760 (’760 patent); 7,577,316; 7,805,025; and 7,813,596 (collectively the Asserted Patents). The Asserted Patents share a common specification¹ and claim priority to a common provisional patent application.

Generally speaking, the Asserted Patents relate to methods for creating synthesized images of a geographic area through which a user may then visually navigate via a computer. ’760 patent abst. In acquiring the images, a recording device is mounted on top of a car that is driven throughout the geographic area. *Id.* at col. 4 ll. 52–65. In one embodiment, a single camera points generally horizontally and perpendicularly to the axis of the street to capture front views of the objects lining the streets (and sometimes side views of buildings, stores, homes, and other objects). *Id.* at col. 5 ll. 55–64. The Asserted Patents disclose that multiple cameras may also be used to capture views in different directions. *Id.* at col. 5 ll. 3–10.

The camera captures and records images as it passes by objects (e.g., stores, buildings, cars). *Id.* at col. 5 ll. 20–21. By combining these images of the

¹ As the Asserted Patents share a common specification, all citations to the specification are to the ’760 patent.

App-3

geographic area, the Asserted Patents disclose generating a composite image that provides a field of view that is wider than that provided by any single image. *Id.* at col. 5 ll. 55–64. Figure 2 illustrates certain aspects of the invention of the Asserted Patents.

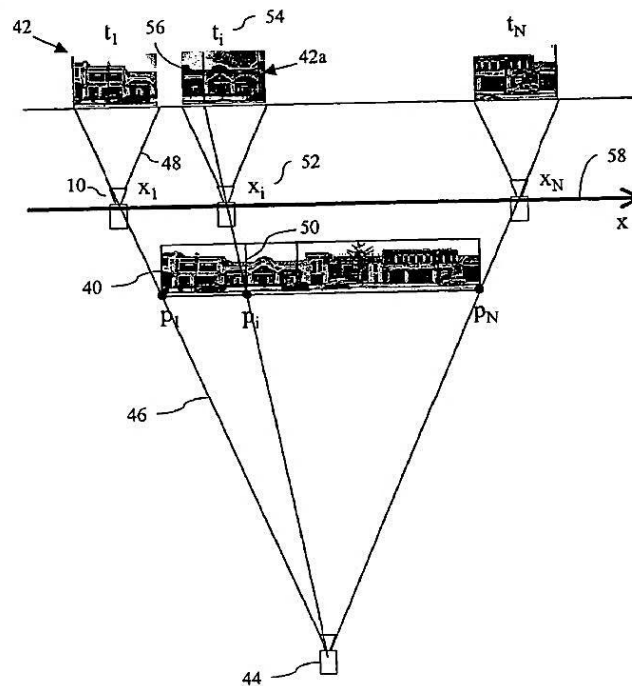
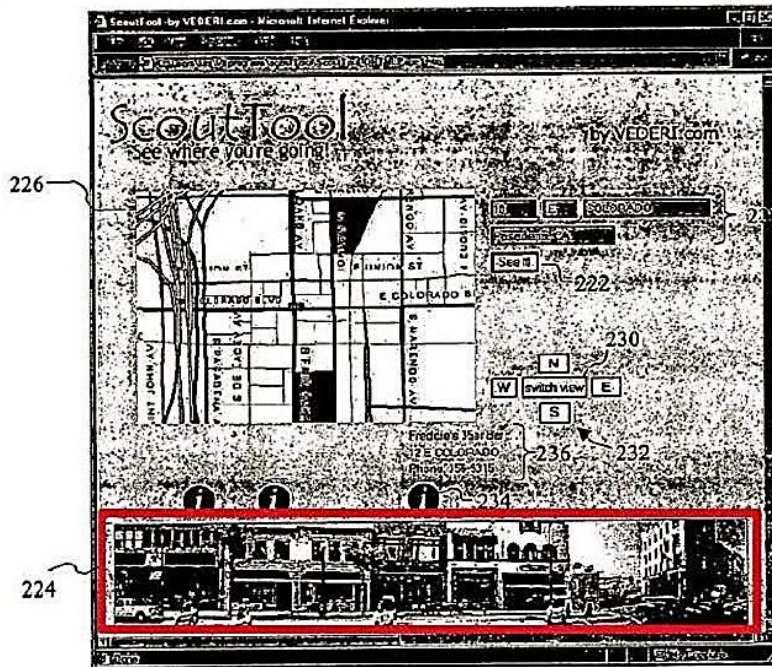


Fig.2

Id. at fig. 2. As shown in Figure 2, the camera captures views as the vehicle moves along axis X (58). *Id.* at col. 5 ll. 55–64. Nonetheless a composite image (40) gives a viewer the perspective of viewing the passing objects from the vantage point of a fictitious camera (44). *Id.* Figure 16 depicts an exemplary graphical user interface that also

App-4

illustrates a composite image as indicated by the box surrounding image area 224. *Id.* at col. 12 ll. 29–41.



Id. at fig. 16 (emphasis added). The Asserted Patents note that the cameras may use fish-eye lenses, *id.* at col. 5 ll. 1–3, and provide “fish-eye views of the objects,” *id.* at col. 6 ll. 23–24.

The Asserted Patents incorporate by reference, and claim priority to, U.S. Provisional Application No. 60/238,490, which was filed on October 6, 2000. That provisional patent application discloses, in relevant part:

Future embodiments of the invention could present video/image data in different formats. For example, rather than using a

App-5

camera facing directly to the street side, a slightly forward (or backward)-looking camera could be used to provide a panoramic look up (or down) the street. Also, if sufficient cameras to cover all viewing directions are used (so as to provide 360 degrees of view) images (and synthetic panoramas) where the direction of view is user-controllable can be provided.

J.A. 217

Claim 1 of the '760 patent is representative of the asserted claims. It recites:

1. In a system including an image source and a user terminal having a screen and an input device, a method for enabling visual navigation of a geographic area from the user terminal, the method comprising:

receiving a first user input specifying a first location in the geographic area;

retrieving from the image source a first image associated with the first location, the image source providing a plurality of *images depicting views of objects in the geographic area, the views being substantially elevations of the objects in the geographic area*, wherein the images are associated with image frames acquired by an image recording device moving along a trajectory;

receiving a second user input specifying a navigation direction relative to the first location in the geographic area;

App-6

determining a second location based on the user specified navigation direction; and retrieving from the image source a second image associated with the second location.

'760 patent col. 15 l. 57–col. 16 l. 9 (emphasis added). The dispute on appeal concerns the “substantially elevations” limitation, which appears in all of the asserted claims. The district court concluded that Google did not infringe any asserted claims after construing the term “images depicting views of objects in a geographic area, the views being substantially elevations of the objects in the geographic area” as “vertical flat (as opposed to curved or spherical) depictions of front or side views.” Thus, under the trial court’s reading of the claims, spherical or curved images fell outside the scope of Vederi’s patent claims.

The accused product—Google’s Street View—provides context for the parties’ disagreement. According to Google, Street View combines images of a wide range of views recorded by multiple cameras having wide-angle lenses mounted on a moving vehicle. J.A. 2567–68. Those photographs are overlapping pictures taken from a single location at approximately the same time. *Id.*

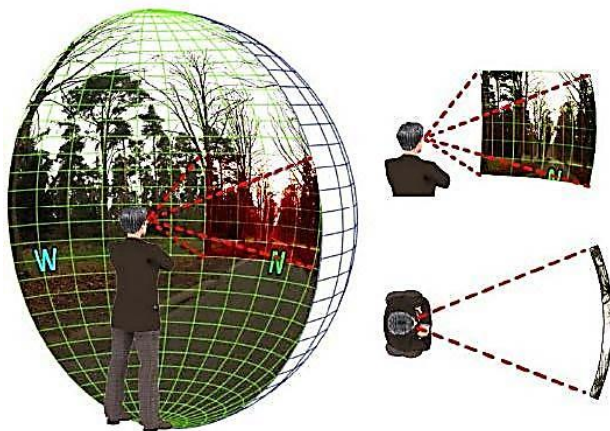


These images are stitched together into a virtual spherical composite image. *Id.* at 2569. The resulting image is a two-dimensional representation of a spherical shape. *Id.*

App-7



The spherical projections are then cut into square tiles to reduce bandwidth when a user is viewing only a portion of the spherical image. *Id.* at 2570. As shown in the figure below, the spherical panorama gives the user the option to scroll around and view objects as if the user were standing in the center of the sphere. *Id.* at 2571–73.



Id. at 3169. According to Google, it does not infringe the Asserted Patents because its product produces images and views that are curved or spherical, and never flat. *Id.* at 2570–73.

III.

The district court conducted a *Markman* hearing on November 22, 2011. The parties agreed that the “substantially elevations” limitation referred to front

App-8

and side views of objects. However, the parties disagreed as to the meaning of the limitation, “depicting views of objects . . . the views being substantially elevations of the objects in the geographic area.” Vederi stated that the limitation “depicting views of objects . . . the views being substantially elevations of objects” means “front or side views of objects.” Google contended that the limitation means “vertical flat (as opposed to curved or spherical) depictions of front or side views.” The district court adopted Google’s construction because it concluded that the Asserted Patents did not “disclose[] anything about spherical views.” *Id.* at 193–94.

Google and Vederi filed competing motions for summary judgment on the issue of infringement. In its opinion on summary judgment, the district court stated that it “adopted Google’s construction of ‘substantially elevations’ because Vederi’s method of taking, processing, and displaying images creates only vertical flat views, not spherical ones.” *Id.* at 4. The district court elaborated by noting that the “photographs are captured by cameras moving along a horizontal plane. . . . The result is one long, flat composite picture of a street Nothing about that method or result suggests that the patents cover curved or spherical images.” *Id.* at 5.

The district court further observed that the reference to 360 degree panning in the provisional patent application refers to the creation of a 360 degree panorama, akin to “panning 360 degrees along a horizontal plane, not within a sphere.” *Id.* at 5. The district court noted that it would be similar to taking

App-9

pictures with a camera “as it spun around on a Lazy Susan.” *Id.* According to the district court, it would not be possible to pan up and down as in Street View. *Id.*

Based on its claim construction, the district court entered summary judgment of non-infringement in favor of Google. The district court noted that “[t]he court’s construction of the ‘substantially elevations’ limitation means that if Street View presents only curved/spherical images, it doesn’t infringe Vederi’s patents because all of Vederi’s patents contain the ‘substantially elevations’ limitations.” *Id.* at 6. After considering the parties’ competing arguments, the court explained that Street View’s images “may appear to be flat to the naked eye, [but] they are actually curved” because of Google’s methods for capturing, processing, and displaying them. *Id.* at 9. The district court concluded, “[b]ecause Street View displays only curved views, it doesn’t contain the ‘substantially elevations’ limitation, and so doesn’t literally infringe Vederi’s patents.” *Id.* It also found no infringement under the doctrine of equivalents. *Id.* at 10.

Vederi appeals. This court has jurisdiction under 28 U.S.C. § 1295(a)(1).

IV.

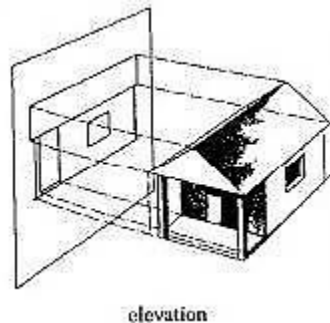
Claim construction is an issue of law reviewed de novo. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1456 (Fed. Cir. 1998). In construing claims, this court relies primarily on the claim language, the specification, and the prosecution history. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314–17 (Fed. Cir. 2005)

(en banc). “Apart from the claim language itself, the specification is the single best guide to the meaning of a claim term.” *AIA Eng’g Ltd. v. Magotteaux Int’l S/A*, 657 F.3d 1264, 1272 (Fed. Cir. 2011) (internal quotations and citation omitted). And while the prosecution history often lacks the clarity of the specification, it is another established source of intrinsic evidence. *Id.* After considering these three sources of intrinsic evidence, a court may also seek guidance from extrinsic evidence. *Phillips*, 415 F.3d at 1317–18. However, extrinsic evidence may be less reliable than the intrinsic evidence. *AIA Eng’g*, 657 F.3d at 1273.

In the present case, the district court construed “images depicting views of objects in a geographic area, the views being substantially elevations of the objects in the geographic area” as “vertical flat (as opposed to curved or spherical) depictions of front or side views.” J.A. 4. A careful review of the record shows that the district court erred by excluding all curved or spherical views and images.

The district court based its construction of “substantially elevations” largely on extrinsic evidence regarding the technical meaning of “elevation” as an architectural term of art. *Id.* at 24. Various technical dictionaries define elevation generally as a projection of a building surface onto a vertical plane or on a plane vertical (at a right angle) to the horizon. *See id.* at 1744, 1748. Indeed, according to Google, elevations are “non-perspective, two-dimensional view[s] depicted as if the viewer were simultaneously positioned at 90 degrees (along the horizontal plane) from every point of the object.”

Appellee's Br. 25. American Architecture: An Illustrated Encyclopedia provides a useful illustration of an elevation, depicted on the plane to the left:



Cyril Harris, American Architecture: An Illustrated Encyclopedia 114 (1998).

However, the district court erred in construing “substantially elevations” without sufficiently considering the intrinsic evidence in this case. In this case, the claim language is a critical part of the record that shows the error in the trial court’s reading of the claims. The operative language in this case is “*substantially* elevations.” The district court’s construction requiring elevation, and “elevation” alone in the strict sense, gives no effect to the “substantially” modifier contained in the claims. “A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.” *Merck & Co., Inc. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005). By effectively reading “substantially” out the claims, the district court erred. The term “substantially” takes on important meaning in light of the rest of the intrinsic evidence in this record.

For example, the Asserted Patents relate to taking photographs or videos of objects to create images and depict views of a geographic area, '760 patent col. 3 ll. 44– 65, not architectural drawings of buildings. Figure 16 is illustrative, depicting a view of buildings showing depth and perspective, not to mention both the front and side of one of the buildings. '760 patent fig. 16; *cf.* Appellee's Br. 23 ("A frontal view of a building that includes part of its side is not an elevation."). Additionally, the specification of the Asserted Patents discloses the use of a fish-eye lens, '760 patent col. 5 ll. 1–3, and "fish-eye views," *id.* at col. 6 l. 23. A photographic image through a fish-eye lens provides a curved, as opposed to vertical, projection, and almost certainly reflects curvature and perspective. In other words, the photographic image is not flat and not an elevation.

Google argues that the meaning of "substantially" merely reflects the fact that, as a practical matter, photographic images, such as those disclosed in the Asserted Patents, could not depict true elevations as that would require a camera lens as large as the object being photographed (here, buildings, cars, and the like). Indeed, Google concedes that using a camera to record an image of a true elevation is a "physical impossibility absent an absurdly large camera," Appellee's Br. 36. But under this interpretation, "substantially" has no independent operative effect other than to account for the specification's disclosure of cameras as a means for capturing images. This interpretation would not allow the claims to cover the fish-eye lens embodiment. Thus, the district court's confining

claim construction does not account for important parts of the intrinsic record.

This court also disagrees with the district court's conclusion that its construction is warranted "because Vederi's method of taking, processing and displaying images creates only vertical flat views, not spherical ones." J.A. 4. For starters, the provisional application incorporated by reference into the Asserted Patents notes that 360 degree synthetic panoramas may be created if a sufficient number of cameras are used. J.A. 217. And while Google argues that the specification only discloses a method of creating the composite images by combining vertical flat columns that would result in vertical flat images, the specification simply states that "preferably" the composite images are created on a column-by-column basis. '760 patent col. 6 ll. 4-9. Even assuming this method results in vertical flat views, the specification does not state that this is the only way to create composite images, and this court perceives no reason to limit the disputed claim language based on that particular embodiment. *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 905-06 (Fed. Cir. 2004).

Nor does the specification demonstrate any disavowal of curved or spherical images supporting the district court's construction. Google places a great deal of weight on the following statement from the Asserted Patents:

The prior art further teaches the dense sampling of images of an object/scene to provide different views of the object/scene. The sampling is generally done in two dimensions either within a plane, or on the

surface of an imaginary sphere surrounding the object/scene. Such a sampling, however, is computationally intensive and hence cumbersome and inefficient in terms of time and cost.

Accordingly, there is a need for a system and method for creating a visual database of a comprehensive geographic area in a more time and cost efficient manner. Such a system should not require the reconstruction of 3D scene geometry nor the dense sampling of the locale in multiple dimensions.

'760 patent col. 1 l. 63–col. 2 l. 7. This statement does not give rise to a clear and unmistakable disavowal. *See Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1322 (Fed. Cir. 2013). In context, these statements in the specification refer to the dense sampling of an object using cameras placed in a sphere surrounding the object looking inwards. Thus, the 3D scene geometry being discussed is using the photographs surrounding an object to reconstruct its 3D shape. In other words, this reference is fundamentally different from using a cluster of cameras to take images from a particular point looking out in all directions. Notably, the Asserted Patents actually disclose doing just that: “a duodecahedron of cameras may be used to record the objects from all viewing directions.” '760 patent col. 5 ll. 6–7. Thus, the record, viewed in its entirety and with reference to the proper context, does not contain any disclaimer, let alone a clear and unmistakable disavowal.

Additionally, the prosecution history does not support the district court's construction. Google contends that the inventors of the Asserted Patents disclaimed the construction sought by Vederi in responding to a rejection over a prior art reference. Specifically, the application leading to the '760 patent initially contained claims reciting "images providing a non-aerial view of the objects." J.A. 404. The Patent Office rejected those claims in view of U.S. Patent No. 6,140,943 (Levine). The applicant responded by amending the claims to remove "non-aerial view" and add "substantially elevations." *Id.* at 494. The applicant also correctly noted that Levine was directed to "map images, which may include names of streets, roads, as well as places of interest" that a traveler could use to navigate through a geographic area. *Id.* at 503–04. Therefore, Levine did not disclose images "depict[ing] views that are 'substantially elevations of the objects in a geographic area'" or "acquired by an image recording device moving along a trajectory." *Id.* at 504. Despite Google's protestations to the contrary, this court discerns no clear and unambiguous disavowal of spherical or curved images that would support the district court's construction. *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1369 (Fed. Cir. 2003).

Having analyzed the claims, the specification and the prosecution history, this court concludes that the district court erred in construing "images depicting views of objects in a geographic area, the views being substantially elevations of the objects in the geographic area" as "vertical flat (as opposed to curved or spherical) depictions of front or side views."

To the contrary, the record shows that “views being substantially elevations of the objects” refers to “front and side views of the objects.” Thus, as properly construed, the claims do not exclude curved or spherical images depicting views that are substantially front or side views of the objects in the geographic area.

VI.

This court has considered Google’s remaining arguments in favor of the district court’s claim construction, but finds them unpersuasive. This court also declines Vederi’s request to consider its infringement arguments on appeal without the benefit of the district court’s fact-finding under a proper construction of the claims. Accordingly, in view of the foregoing, this court reverses the district court’s claim construction, vacates its judgment of non-infringement and remands for further proceedings consistent with this opinion.

VACATED AND REMANDED

App-17

Appendix B

**UNITED STATES DISTRICT COURT FOR THE
CENTRAL DISTRICT OF CALIFORNIA**

VEDERI, LLC,

Plaintiff,

v.

GOOGLE, INC.,

Defendant.

No. 2:10-cv-07747-AK-CW

HONORABLE ALEX KOZINSKI,
UNITED STATES DISTRICT JUDGE PRESIDING
REPORTER'S TRANSCRIPT OF PROCEEDINGS
PASADENA, CALIFORNIA
TUESDAY, NOVEMBER 22, 2011

* * *

[104]

THE COURT: . . . Next Item.

Depicting views, the views being substantial elevations. I know this is a biggy, although I have no idea what it means. But I am sure you will enlighten me.

Well, I have some idea what it means. I am sure I will first be more confused before I am enlightened.

What is at stake here?

First of all—excuse me—can you help me find it in context in Joint Appendix A or some anywhere. I would like to see the language in context.

MR. DILLARD: If we have the 760 patent.

THE COURT: 760 patent. That is fine. That works for me.

MR. DILLARD: And, again, going to Column 15.

THE COURT: I am with you. Page? I'm sorry. Line?

MR. DILLARD: The claim element in Claim 1 starts around 63.

THE COURT: Right. I do have them at home, but, never mind, go ahead.

MR. DILLARD: Well, so this element reads receiving from the image source a first image associated with the first location. The image source providing a plurality of images depicting views of objects in the geographic area, the views being substantially elevations of the objects in the geographic area wherein the images are associated with image frames acquired by an image recording device moving along a trajectory.

THE COURT: Okay.

MR. DILLARD: So we have this phrase, the views being substantially elevations of the objects in the geographic area.

And the different constructions, we propose front back or side views. And, actually, in preparing for the hearing, it occurs to me that if you are taking a picture from a camera, you will certainly get the

front of whatever object you are looking at. You may get some of the side, but you would never get the back of that. So I think our claim construction ought to be modified to remove back views just from a practical standpoint.

THE COURT: That makes sense, but the operative difference between your construction and Google's construction is you agree on the front. Back, you now say, the front—I'm sorry—the front and side. That is all the front and side views, but they say, our pictures actually go up, and you can actually sort of see up whereas this is a flat picture.

MR. DILLARD: In the embodiments, they are very long, certainly need to be that long.

What is agreed upon is both the composites shown in the patent as well as Google's images are both composites. In other words, you are stitching together photographs.

Now, in the Vederi preferred way, they will stitch together splices of various recorded images in order to get a nice wide angle, but as shown in, for example, that Figure 16 of the Scout Tool, you do get angles, so you can see sides of buildings and so forth.

The Vederi composites are stored as rectangular composites. Google's, they do have 360-degree composites, and they are apparently mapped on the sphere and then stored on a flat plain, sort of like if you had a globe, you made it flat. So the question is should the views being substantially elevations be limited to flat vertical orientations.

And we know that both the Vederi system and their composites and Google's composites if you look at them, if you pull up the street view, it is an elevational view of a building if you are looking out from the side camera, but it is an elevational view of whatever the camera is pointed at.

Now, the basis for the claim that the Google style 360-degree panoramas is that there is a prosecution disclaimer, and, basically, they are saying that because of something said in the background of the invention section of the patent, that the spherical-type mapping that Google does is something that has been excluded from the scope of the claims. And we couldn't disagree more.

THE COURT: Well, but there is really no claim to anything other than it says substantially elevations, and I haven't looked up the term elevations, but my understanding from the days when I was doing construction on my house is that and here in the building, that they are just flat images. There are some perspective images of other locations.

MR. DILLARD: Well, the fact that if you pull up street view, you might be able to pan up or down doesn't alter the fact that when you pull it up for an address, you are getting an elevational view of whatever is right in front of or the address.

Now, so what Google said has happened that in the background section, the inventors were discussing prior art and they made this disavowal. The problem is that the Google expert has misread

the language and came to a conclusion that it just does not follow.

If I could call the court's attention to Column 1 of the 760 patent.

THE COURT: Column 1?

MR. DILLARD: Yes.

THE COURT: Okay.

MR. DILLARD: There is two prior art methods that the inventors are distinguishing. One is not as critical to us, but it is this three dimensional rendering where you create a virtual—what do they call it—electronically piecing photographs on a polygonal mesh that provides the framework of a three dimensional rendering. That is shown and described in Dr. Goncalves' declaration. But the more important one and the one that Google claims provides a disclaimer is the paragraph that starts at Line 63.

It reads, "the prior art further teaches the dense sampling of images of an object scene to provide different views of the object, slash, scene. The sampling is either done in two dimensions either within a plain or on the surface of an imaginary sphere surrounding the object, slash, scene."

Now, Google's expert appears to have read that as not a[n] imaginary sphere surrounding the object or scene but an imaginary sphere surrounding the camera and this is quite a different situation. If you have an object in the scene whether it is a tree or building, you can imagine a giant bubble around it. And what the inventors are talking about is there

would be cameras all around this object and taking enough photographs so that you could go to any other view, any other location on this sphere and be able to see that object from that view.

So it is—there was an example of a piece of art that had images taken all around it, and it was museum art. And people were able to basically look all the way around, spin it on the computer based on all these different camera angles. And it would be just, you know, like being able to turn it and look up and down and so forth if you had enough cameras.

This is a technique referred to as light rendering. That particular language is not used in the patent but this dense sampling is. And that is a whole lot different than having six or eight cameras all looking out in different directions and just taking photographs.

And so the inventors describe this sampling of looking toward an object from different view points as such sampling, however, is computationally intensive and hence cumbersome and inefficient in terms of time and cost. You can just imagine if you were trying to, you know, do this spherical looking in on every object in a scene, it would be incredibly expensive as opposed to just taking photographs.

So that is what the inventors were talking about when they said computationally intensive as opposed to what Ms. Rao indicated that the Google system is computationally intensive. There are worlds of difference.

Now, did the inventors have in mind 360-degree panoramas when they filed their application? And

the answer to that is yes. And they actually disclose the possibility of 360-degree panoramas in addition to their long panoramas.

THE COURT: Where is that?

MR. DILLARD: That is in the provisional patent application which was filed in August of 2000—a few months before the regular application, but it is incorporated by reference in all of the patents. So it is as though the disclosure there is part of all the patent.

And this is—the quote that we have been looking at is in our responsive brief it is at Page 21, describes—see, that would be Document 56, your Honor.

THE COURT: What does it say?

MR. DILLARD: The paragraph of interest is future embodiments of the invention could produce video, slash, image data in different formats, for example, rather than using a camera facing.

THE COURT: I got it. What page?

MR. DILLARD: I'm sorry. 21.

THE COURT: Okay. What line are you reading from.

MR. DILLARD: I started at 13. Where I was getting to—

THE COURT: Future embodiments?

MR. DILLARD: Yes. And, in particular, the second sentence in that paragraph, also, if sufficient cameras to cover all viewing directions are used so as

to provide 360 degrees of view, images and synthetic panoramas where the direction of view is user controllable can be provided.

So clearly they had in mind 360 degrees panoramic views, but, of course, that was far more expensive at the time, but they certainly had, you know, synthetic 360-degree panoramas in view which is what Google is saying. You can spin 360 degrees.

There is no question that they are composites. It is admitted in their papers that those are composite images, and there is, really, we see no reason other than Google finding a noninfringement argument to restrict the language, substantially elevations to being flat vertical.

THE COURT: Okay. Why don't we hear from Google?

MR. DILLARD: I'm sorry?

THE COURT: We will hear from Google.

MS. RAO: Before I begin, the substance of the technical merits of the arguments and the terms, I would like to say that the disclaimer we are relying on is a disclaimer in the specification and that the law for a specification disclaimer is that when the inventor dictates the correct claims code in their specification that that should govern the claim construction process.

And so I will get to that. That is from the Phillips case, Phillips v. AWH, and so we are relying [o]n a specification disclaimer not a prosecution disclaimer. So looking at the two constructions.

THE COURT: And what packet exactly does the disclaimer say?

MS. RAO: So I will—can I have Slide 41, please. So what we are saying is the background is talking about a method of visual [navigation] going down the street. So it is saying it is discussing different prior art approaches to get a wider field of view or images, and in that sense, it talks about using a shorter focal length of a video camera to get a wider angle, and then it talks about dense sampling of images right after discussing the visual [navigation] and going to shorter focal length to get a wider range of view.

And, then, it says, the prior art teaches dense sampling, and the sampling can be done in two dimensions in a plane or on the surface of an imaginary sphere surrounding the object or scene. And such a sampling is computationally intensive and, hence, cumbersome and inefficient in terms of time and cost. And so this language explicitly disclaims circle projections on an imaginary sphere.

It doesn't say light field rendering here. It doesn't say light field rendering anywhere in the patent. Vederi agrees that there was a disclaimer. They are disputing the scope of the disclaimer. They are saying it was limited to inward looking views because it is about light field rendering.

Now, we took a look at the evidence they cited to us, and I would like to direct the court to Slide 59. Here, Vederi's inventor says that our expert confused a spherical reference frame around a camera that is inward looking with an outward looking view, and the inward looking view is used for light field

rendering, and that is the method we were distinguishing.

And if you then skip ahead to Slide 62, Vederi cites to a Levoy article and talks about a Levoy patent they submitted to the patent office saying this is about light field rendering and that is different from what we are doing.

THE COURT: Let me say this. Why is this an infringement issue? Why isn't this a claims construction issue?

MS. RAO: Because there is a specification disclaimer and so they are trying to say substantially elevations.

THE COURT: I mean, what you are trying to do is add an exclusion to the claim.

MS. RAO: That's correct, your Honor. And we believe, in this instance, it is proper to do that because it is a specification disclaimer, and it is permissible under Phillips. In fact, where the specification says an intentional when the specification reveals an intentional disclaimer which this is not what my patent is about. I don't do this. This is not covered by my invention. It is entirely proper to put that as a limitation on the claim. So we believe that it is a proper issue for claim construction.

THE COURT: And you say this is—

MS. RAO: I'm sorry.

THE COURT: You are saying this supersedes the provisional application which opposing counsel was citing me?

MS. RAO: The provisional application is not relevant to this issue. The provisional application is talking about looking up the street, looking down the street and then talking about panning 360 degrees along an equator, not along a sphere.

So if we look at that disclosure in the provisional, Slide 50, it is talking about going up the street, down the street, all round the street.

THE COURT: It doesn't say that.

MS. RAO: Well—

THE COURT: I mean, you tell me that is what it says, but, in fact, it just says 360 degrees.

MS. RAO: 360 degrees doesn't make a spherical projection. While this says 360 degrees, the disclaimer says we disclaim spherical projections that that is computationally intensive, and that is not what we do.

THE COURT: I guess I am having trouble understanding. So what you are saying is so this was meant to say you could do a 360-degree view on a horizontal plane?

MS. RAO: That's right.

THE COURT: And how is that different from stitching together images? Does that mean that you can look up the street and down the street?

[MS. RAO]: Well, it is simply saying take the segments of the images and you can stitch them together. Our position—

THE COURT: Right. We are talking about stitching them together. And I understand that is

what they are doing. They are stitching together the image. How is that different from this 360-degree view that you talk about here? You say, oh, no, here, it talks about if you have enough cameras, you could get a 360-degree view. You are saying, well, that means a rotational view. What does that have to do with stitching?

MS. RAO: All that adds is a slice of a sphere. It doesn't add the sphere. So if I stand in one spot and I turn around and take pictures all around, 360 degrees, I stitch them together using the Vederi claim method of the column by column approach.

THE COURT: See, that is what comes from not listening to the question. I understand the difference between 360-degrees and a horizontal plane. I understand that so telling me that distinction again is not going to help. What I am saying is if I accept your view that this is a 360-degree image on a horizontal plane, how is that different than just stitching together a bunch of images? What does that add? You say you can also do this other thing, but you have already agreed that they are talking about stitching images together. So what does this other thing they are saying they could do add?

MS. RAO: I am not following your question. I'm sorry.

THE COURT: What is it they are saying here they could do in addition to what they claim otherwise? See, this where they are saying if you have sufficient cameras, you could provide 360-degree views. What is the additional? What is the incremental thing we are talking about there?

MS. RAO: All they are talking about is having more pictures and more viewing directions. You would still have the panorama along the flat vertical. So it wouldn't look like a sphere. It wouldn't look like a spherical projection. So they are simply talking about having a user be able to view different viewing directions.

THE COURT: Okay. Try column A. Column B, again, what could you do without this that you could do with this? Give me an example of something that would fit into this that wouldn't fit into that?

MS. RAO: What is the that?

THE COURT: You are saying this is an addition, they claim here they can do this if they have more cameras. You are saying that is all in one. You are talking, again, always one angle. Right. Okay. And so what are they adding? What is it more than the—they said if you had more cameras, you could do more. What is that more you are talking about here?

MS. RAO: I don't believe they are claiming more than what is already in the spec.

THE COURT: Well, on the other hand, if I read it to mean 360 degrees up and down, then it does mean more, and then this makes sense. To say, oh, it doesn't really claim anything more, that sort of defeats your construction. It means you are wrong about what it must mean because it must mean something. It must mean you could do something here more if you have more cameras. So what is that more as you see it?

MS. RAO: More as I see it, it is more images to put into the database so that if a viewer says I want to look in that direction, it can pull up an image from that view.

THE COURT: You just pointed at a particular direction, but I don't know what direction you are talking about.

MS. RAO: If we are talking about a horizontal plane, I am saying that the side views are the ones that are stitched together into the panorama. The front, the back or the angular views may simply be views that are stored in the database for retrieval, not necessarily stitched into one panorama.

THE COURT: Okay.

MS. RAO: The technique they disclosed was about taking flat images and stitching them together, and they said—

THE COURT: Give me one thing you could see under this addition that you couldn't see without this addition. Give me one thing.

MS. RAO: One thing here is that—

THE COURT: Just one thing.

MS. RAO: Pictures of the front and back of the road.

THE COURT: So up the street, down the street. Okay.

MS. RAO: Now, getting back to their point about the Levoy patent, and they said that that was distinguished. I would like to turn to Slide 63.

THE COURT: Okay.

MS. RAO: And this field of light field rendering talks about both inward looking and outward looking views, that is said right in the abstract of the Levoy patent. They say is an example of the light field rendering that we are distinguishing. So it is not simply inward looking views, it is also outward looking views.

If you look at the next slide, Slide 64, they focus on a picture of a lion being photographed from multiple directions, but, here, in the Levoy patent, there is a picture of a hallway showing that you could use—

THE COURT: Well, that is fine. Thank you.

I don't think the patent disclosed anything about spherical views. So I will go with Google's construction on this one. Okay. Except take out the backs. Okay.

* * *

Appendix C

**UNITED STATES DISTRICT COURT FOR THE
CENTRAL DISTRICT OF CALIFORNIA**

VEDERI, LLC,

Plaintiff,

v.

GOOGLE, INC.,

Defendant.

No. 2:10-cv-07747-AK-CW

OPINION

September 26, 2012

KOZINSKI, Circuit Judge:

Vederi owns U.S. Patent Nos. 7,239,760 (“’760 patent”); 7,577,316 (“’316 patent”); 7,805,025 (“’025 patent”); and 7,813,596 (“’596 patent”), which cover certain methods for enabling users to navigate a geographic area visually from a device, such as a personal computer. Google provides the well-known Street View service, which allows users to explore geographic locations around the world by viewing spherical depictions of street-level imagery. Vederi alleges that Street View infringes its patents, and moves for summary judgment as to claims 13 and 20 of the ’316 patent and claims 28 and 35 of the ’025 patent. Mem. in Supp. of Vederi’s Motion for Summ. J. 5, 18. Google cross-moves for summary judgment, arguing that Street View doesn’t infringe any of Vederi’s patents because each of the patents contains a limitation that Street View doesn’t. *See* Mem. in Supp. of Google’s Motion for Summ. J. 9.

I. *Markman* Hearing

Each of Vederi's patents contains the limitation "depicting views of objects in the geographic area, the views being substantially elevations," which relates to the retrieved images presented to the user. '760 patent, 16:38, 15:65–67; '316 patent, 16:37, 16:56–17:20, 15:49–51; '025 patent, 18:43, 19:11, 17:47–50; '596 patent, 16:6, 15:49–51, 18:7, 17:15–18. At a *Markman* hearing, the court construed the meaning of the "substantially elevations" limitation. *See* Hr'g Tr. 120:25–121:3, Nov. 22, 2011; *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996). Though the parties agreed that the limitation referred to front and side views of objects, they disagreed as to whether the limitation covered only vertical flat views, as opposed to curved or spherical views. *See* Hr'g Tr. 106:14–20. Vederi argued that the limitation referred to all front and side views of objects, *id.* at 106:6–7, 12–13, while Google claimed that the limitation covered only "vertical flat (as opposed to curved or spherical) depictions." Google's Opening Claim Construction Br. 17. The court adopted Google's construction because Vederi's method of taking, processing and displaying images creates only vertical flat views, not spherical ones. *See* Hr'g Tr. 120:24–121:3.

The method covered by Vederi's patents presents composite images created by stitching photographs together. Hr'g Tr. 107:7–13. The photographs are captured by cameras moving along a horizontal plane. '316 patent, 15:52–53; '025 patent, 15:53–54; Hr'g Tr. 107:7–8. The result is one long, flat composite picture of a street. *See, e.g.,* Mem. in Supp.

of Vederi's Mot. for Summ. J. 11. Nothing about the method or result suggests that the patents cover curved or spherical images.

In construing the limitation to cover only flat views, the court rejected Vederi's argument regarding its provisional patent application. Vederi's application disclosed that if a sufficient number of cameras were used, a 360-degree panorama could be created, allowing the user to control the direction of the view. Hr'g Tr. 112:3–7; Bostwick Decl. Ex. I, at 249. According to Vederi, this covered curved views. Hr'g Tr. 112:8–18. In reality, Vederi's provisional application referred to panning 360 degrees along a horizontal plane, not within a sphere. *Id.* at 115:19–23. The resulting panorama would be as if a camera took pictures as it spun around on a Lazy Susan. It would not be possible, as it is with Street View, to pan up and see the top of a tall building or down and see the pavement.

The court's construction of the “substantially elevations” limitation means that if Street View presents only curved/spherical images, it doesn't infringe Vederi's patents because all of Vederi's patents contain the “substantially elevations” limitation. *See* '760 patent, 16:38, 15:65–67; '316 patent, 16:37, 16:56–17:20, 15:49–51; '025 patent, 18:43, 19:11, 17:47–50; '596 patent, 16:6, 15:49–51, 18:7, 17:15–18.

II. Summary Judgment

“To establish infringement, every limitation set forth in a patent claim must be found in an accused product or process exactly or by a substantial

equivalent.” *Laitram Corp. v. Rexnord, Inc.*, 939 F.2d 1533, 1535 (Fed. Cir. 1991). If an accused product fails to meet even a single claim element, there’s no infringement. *Id.* And, if there’s no genuine issue of material fact regarding the relevant details of the accused product, “the question of literal infringement collapses to one of claim construction and is thus amenable to summary judgment.” *Athletic Alternatives, Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1578 (Fed. Cir. 1996); *see also* Fed. R. Civ. P. 56(a).

Vederi has fought well and hard to make a genuine issue of the views that Street View captures, processes and displays. But the court is persuaded that Street View presents only curved/spherical views, not vertical flat ones: Street View “allows a user to look around inside a spherical virtual environment, providing the effect of actually being at the location where the images used to create the spherical image were captured.” Martin Decl. in Supp. of Google’s Motion for Summ. J. ¶ 27.

As Google’s expert explains, Street View’s images are created from a cluster of wide-angle cameras mounted to a car. *Id.* at ¶¶ 9–13. These cameras capture images in all directions at the same moment. *Id.* The images are then stitched together to create a spherical panorama. *Id.* at ¶¶ 13–15. The panorama is cut into tiles that are sent to an user’s web browser and projected onto a virtual sphere for display. Martin Decl. ¶¶ 19–20, 23–26; Parcher Decl. Ex. 13, at 26. The result is very cool: You can look up, down and all around, as though you were in a spherical projection of the location. Martin Decl. ¶ 27. And, while Google strives to minimize the distortion in its

images, Street View still depicts somewhat distorted views—*i.e.*, curved/spherical ones. *Id.* at ¶ 17–21.

Vederi counters Google’s expert with its own, who explains that “every view rendered from the center of the spherical projection is a perspective correct, flat view.” Ripley Opp’n Decl. ¶ 29. Thus, according to Vederi’s expert, “Street View provides flat, non-curved views of objects in the area.” *Id.* (emphasis omitted). But Vederi’s expert offers merely “[c]onclusory, speculative testimony . . . [that] is insufficient to raise genuine issues of fact and defeat summary judgment.” *Soremekun v. Thrifty Payless, Inc.*, 509 F.3d 978, 984 (9th Cir. 2007). By contrast, Google’s expert supports his opinion with specific facts regarding Street View’s process. *See generally* Martin Decl. ¶¶ 8–28.

The court also rejects Vederi’s assertion that Google admits its views are flat. Vederi argues that because Google says that Street View displays “rectilinear” images, it necessarily depicts vertical flat views. Mem. in Supp. of Vederi’s Mot. for Summ. J. 12 n.14. Vederi points to Dictionary.com’s definition of rectilinear: “formed by straight lines” or “characterized by straight lines.” *Rectilinear*, Dictionary.com, dictionary.reference.com/browse/rectilinear (last visited Sept. 11, 2012); *see* Parcher Decl. Ex. 14, at 32. But “rectilinear” can also mean “bounded by straight lines,” *Webster’s New International Dictionary* 2082 (2d ed. 1939), and this is precisely how Google used it. Google cuts the spherical panorama into rectilinear tiles so the images can fit on the user’s screen; the views within the tiles remain curved. *See* Grindon Reply Decl.

¶¶ 10–12; Google’s Mem. in Opp’n to Vederi’s Mot. for Summ. J. 13.

Finally, the court rejects Vederi’s argument that “vertical flat . . . depictions” means “substantially horizontal views.” Mem. in Supp. of Vederi’s Mot. for Summ. J. 10; Vederi’s Statement of Uncontroverted Facts 24. When you initially access a location in Street View, you see a substantially horizontal view, as though you were standing with your feet on the ground, looking straight ahead. *See* Martin Decl. in Supp. of Google’s Mem. in Opp’n ¶¶ 3–4. Vederi argues that at least this view is vertical flat. Mem. in Supp. of Vederi’s Mot. for Summ. J. 14. When you look out to sea, the surface appears to be flat, but we all know it actually curves away from you. It’s somewhat the same in Street View. While some views may appear to be flat to the naked eye, they are actually curved, because of the method by which Google takes, processes and displays the images. *See* Martin Decl. in Supp. of Google’s Mot. for Summ. J. ¶¶ 22, 28. Because Street View displays only curved views, it doesn’t contain the “substantially elevations” limitation, and so doesn’t literally infringe Vederi’s patents.

Neither does Street View infringe under the doctrine of equivalents. “[I]f a court determines that a finding of infringement under the doctrine of equivalents would entirely vitiate a particular claimed element, then the court should rule that there is no infringement under the doctrine of equivalents.” *Lockheed Martin Corp. v. Space Sys./Loral, Inc.*, 324 F.3d 1308, 1321 (Fed. Cir. 2003) (internal quotation marks and alteration omitted).

Were the court to hold Street View's curved/spherical images are a substantial equivalent to vertical flat ones, it would eliminate the "vertical flat (as opposed to curved or spherical)" portion of the "substantially elevations" construction, leaving only "depictions of front or side views." Since that would vitiate the claim construction, the court cannot find infringement under the doctrine of equivalents.

* * *

Because Google has proved that Street View doesn't contain the "substantially elevations" limitation of the patents-at-issue, it's entitled to summary judgment. *See* Fed. R. Civ. P. 56(a); *Vivid Tech., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 806–07 (Fed. Cir. 1999).

DEFENDANT'S MOTION FOR SUMMARY JUDGMENT IS GRANTED; PLAINTIFF'S MOTION FOR SUMMARY JUDGMENT IS DENIED.

September 26, 2012

/s/
HON. ALEX KOZINSKI
Chief Circuit Judge
Sitting by designation
28 U.S.C. § 291(b)

Appendix D

**UNITED STATES DISTRICT COURT FOR THE
CENTRAL DISTRICT OF CALIFORNIA**

VEDERI, LLC,

Plaintiff,

v.

GOOGLE, INC.,

Defendant.

**AND RELATED
COUNTERCLAIMS**

No. 2:10-cv-07747-AK-CW

JUDGMENT

For the reasons stated in the court's opinion dated September 26, 2012 and entered October 2, 2012 (docket entry 112),

IT IS HEREBY ORDERED AND ADJUDGED as follows:

1. Google's Motion for Summary Judgment of Noninfringement of All Asserted Claims of U.S. Patent Nos. 7,239,760; 7,577,316; 7,805,025; and 7,813,596 is GRANTED.

2. Vederi's Motion for Summary Judgment of Literal Infringement is DENIED.

3. Plaintiff Vederi takes nothing, the action by Vederi is dismissed with prejudice and Google is to recover its costs from Vederi.

IT IS SO ORDERED AND ADJUDGED.

Dated: Oct. 5, 2012

/s/

HON. ALEX KOZINSKI

Chief Circuit Judge

Sitting by designation

28 U.S.C. § 291(b)

Appendix E

**UNITED STATES DISTRICT COURT FOR THE
CENTRAL DISTRICT OF CALIFORNIA**

VEDERI, LLC, Plaintiff, v. GOOGLE, INC., Defendant.	No. 2:10-cv-07747-AK-CW
AND RELATED COUNTERCLAIMS	AMENDED JUDGMENT February 27, 2012

For the reasons stated in the Court's opinion dated September 26, 2012, and entered October 2, 2012 (docket entry 112), and further in view of the parties' Joint Motion for Entry of Amended Final Judgment:

**IT IS HEREBY ORDERED AND ADJUDGED
AS FOLLOWS:**

1. Google's Motion for Summary Judgment of Noninfringement of All Asserted Claims of U.S. Patent Nos. 7,239,760; 7,577,316; 7,805,025; and 7,813,596 is GRANTED.
2. Vederi's Motion for Summary Judgment of Literal Infringement is DENIED.
3. Judgment is entered in favor of Google on Vederi's claims of infringement and Google's counterclaims for declaratory judgment of non-infringement.

4. Google's counterclaims for invalidity are dismissed without prejudice in light of the above judgment.

5. Plaintiff Vederi takes nothing, the action by Vederi is dismissed with prejudice, and Google is to recover its costs from Vederi.

IT IS SO ORDERED AND ADJUDGED.

Dated: Feb. 27, 2012

/s/

HON. ALEX KOZINSKI

Chief Circuit Judge

Sitting by designation

28 U.S.C. § 291(b)

App-42

Appendix F

**United States Court of Appeals
Federal Circuit**

VEDERI, LLC,
Plaintiff-Appellant,

v.

GOOGLE, INC.,
Defendant-Appellee.

2013-1057, -1296

Appeals from the United States District Court for the
Central District of California in No. 10-CV-7747,
Chief Judge Alex Kozinski

ON PETITION FOR REHEARING EN BANC

Before PROST,* *Chief Judge*, NEWMAN, LOURIE,
RADER,** DYK, MOORE, O'MALLEY, REYNA, WALLACH,
TARANTO, CHEN, and HUGHES, *Circuit Judges*.

* Sharon Prost assumed the position of Chief Judge on May 31, 2014.

** Randall R. Rader vacated the position of Chief Judge on May 30, 2014.

PER CURIAM.

ORDER

Appellee Google, Inc. filed a petition for rehearing en banc. A response to the petition was invited by the court and filed by appellant Vederi, LLC. The petition was first referred as a petition for rehearing to the panel that heard the appeal, and thereafter the petition for rehearing en banc was referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

The mandate of the court will issue on June 25, 2014.

FOR THE COURT

June 18, 2014
Date

/s/ Daniel E. O'Toole
Daniel E. O'Toole
Clerk of Court