United States Court of Appeals for the Federal Circuit

02-1212,-1213

INTEL CORPORATION,

Plaintiff-Appellant,

v.

VIA TECHNOLOGIES, INC., a California Corporation,
VIA TECHNOLOGIES, INC., a Taiwan Corporation,

Defendants-Cross Appellants.

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Appealed from: United States District Court for the Northern District of California

Judge William H. Alsup

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DECIDED: February 14, 2003

Before MAYER, Chief Judge, MICHEL, and CLEVENGER, Circuit Judges.

MICHEL, Circuit Judge.

Intel Corporation ("Intel") appeals the December 13, 2001, decision of the United States District Court for the Northern District of California, Intel Corp. v. VIA Techs., Inc., C-99-03062 (N.D. Cal. Dec. 13, 2001), entering summary judgment of noninfringement for the accused infringers, VIA Technologies, Inc., California and Taiwan (collectively "VIA"), on the ground that VIA was licensed to practice Intel's U.S. Patent No. 6,006,291 ("the '291 patent"). VIA cross-appeals the final judgment of the district court denying VIA's counterclaim for a declaratory judgment of invalidity for indefiniteness of the '291 patent. As to infringement, because the license agreement is ambiguous, as the district court held in the alternative, and under Delaware law ambiguity has to be resolved against Intel as the sole drafter, we affirm the district court's judgment of non-infringement. As to invalidity, because the district court properly determined the

structures corresponding to the functions recited in daim 1 of the '291 patent and that such structure is sufficiently specific, we conclude that the claim, which contains means-plus-function limitations, is not indefinite and therefore affirm the district court's judgment of no invalidity.

BACKGROUND

Intel promulgated a new industry standard for certain computer-chip specifications. Standardization among various chip manufacturers promotes component inter-operability and benefits customers. Intel thus grants a royalty-free cross-license to all those interested in complying with its new standard.

The new standard relates to the electronic interface and signal protocols by which devices in a computer system communicate with each other. In 1996, Intel published the Accelerated Graphic Port ("AGP") Interface Specification, Revision 1.0 ("AGP 1.0"), describing how AGP allows graphics devices to communicate with the core logic (also called a "chipset") without using the traditional Peripheral Component Interface ("PCI") bus. Use of the PCI bus slows communication.

In 1998, Intel published Revision 2.0 of the AGP Specification, AGP 2.0. Other than refinements to the pre-existing AGP 1.0, two major improvements disclosed in AGP 2.0 are two new protocols known as date transfers at 4x ("4x") and Fast Write. Both 4x and Fast Write, however, are optional protocols of AGP 2.0. AGP 2.0 Interface Specification, at 33. Thus, one can comply with AGP 2.0 if one includes the other basic features whether or not one includes 4x and Fast Write.

Intel licenses both AGP 1.0 and 2.0 to interested parties on a reciprocal, royalty-free basis. The license agreement provides for

> a nonexclusive, royalty-free, nontransferable, non-sublicenseable,

> worldwide license under its Interface Claims to make, have made, use, import, offer to sell and sell products which comply with the AGP Interfaces; provided that such license shall not extend to features of a product which are not required to comply with the AGP Interfaces or to which there was a feasible alternative to infringing a given claim.

AGP Interface Specifications Agreement (emphases added). The license in turn defines "Interface Claims" as:

> "Interface Claims" means claims of a patent or patent application, which are owned or controlled by a party, that must be infringed in order to comply with the AGP Interfaces. "Interface Claims" does not include claims relating to manufacturing technology, claims not required to be infringed in complying with the AGP Interfaces (even if in the same patent as Interface Claims), or claims which, if licensed, would require a payment of royalties to unaffiliated third parties.

Id. (emphasis added). "AGP Interfaces" is defined as:

> The "AGP Interfaces" are the electrical interfaces and bus control protocols disclosed in, and required by, the Accelerated Graphics Port Interface Specifications.

Id. (emphasis added). The "Accelerated Graphics Port Interface Specifications" is in turn defined as:

> The "Accelerated Graphics Port Interface Specifications" are the

specifications described in the documents entitled *Accelerated Graphics Port Interface Specification, Revisions 1.0 and 2.0*, published by Intel.

Id. Thus, after this chain of definitions is untangled, the license covers any patent claims that "must be infringed in order to comply with" "the electrical interfaces and bus control protocols disclosed in, and required by," "the specifications described in the documents entitled Accelerated Graphics Port Interface Specification, Revisions 1.0 and 2.0, published by Intel."

The license agreement was drafted by Intel and is "legally binding" to anyone whose authorized representative signs and delivers the agreement to Intel at the address listed on the one-page agreement. Id. In 1996, after AGP 1.0 was published, VIA signed a license agreement for AGP 1.0. After the release of AGP 2.0, VIA started making chipsets that supported Fast Write and 4x. VIA signed the AGP 2.0 license in 2000. The AGP 2.0 license is the subject of this case.

Intel owns the '291 patent, which teaches the technology of Fast Write. In 2000, after VIA signed the AGP license agreement, Intel sued VIA for infringing the '291 patent. VIA concedes that its products practice at least claims 1, 4, 6, and 7 of the '291 patent; however, VIA argues, it is licensed to practice the '291 patent under the AGP 2.0 cross-license agreement. The issue becomes whether VIA's chipset products that perform Fast Write are within the scope of the AGP license, more specifically, whether Fast Write is "required" within the meaning of the license. After construing the contract language and applying contra proferentum, the district court held, in an order dated November 20, 2001, that Fast Write was covered by the AGP license and, therefore, VIA was licensed to make products performing Fast Write and could not be liable for infringing the '291 patent. Intel Corp. v. VIA Techs., 174 F. Supp. 2d 1038, 1055

(N.D. Cal. 2001). The court also discussed extrinsic evidence provided by both parties but was not persuaded by the evidence provided by Intel to so construe the scope of the license as to decline a summary judgment of noninfringement for VIA. Id. at 1052-55.

VIA cross-claimed for a declaratory judgment of invalidity of the '291 patent. VIA alleged, inter alia, that claim 1 of the '291 patent, the only independent claim of the patent, was indefinite. In an order dated November 20, 2001, the district court denied VIA's motion for summary judgment of invalidity. Intel Corp. v. VIA Techs., C 99-03062 (N.D. Cal. Nov. 20, 2001) (order denying VIA's motion for summary judgment of invalidity of the '291 patent). In this order, the court also denied-in-part and granted-in-part Intel's cross-motion for summary judgment of validity. Id. at 12. It was denied as to claim indefiniteness.

On December 12, 2001, Intel and VIA submitted a joint stipulation to dispose of the entire case between the parties. According to the stipulation, a final judgment was to be entered in favor of VIA on Intel's claim of infringement of the '291 patent, pursuant to the district court's November 20, 2001 order granting VIA's motion for summary judgment of noninfringement. Additionally, the parties stipulated that a final judgment was to be entered against VIA on its counterclaim for a declaratory judgment of invalidity of the '291 patent, pursuant to the court's November 20, 2001 order denying VIA's motion for summary judgment of invalidity. The district court entered the final judgment as stipulated by the parties and closed the file on December 13, 2001.

Intel appeals the district court's grant of summary judgment that VIA does not infringe the '291 patent due to an express license. VIA cross-appeals the court's decision on validity. The parties also dispute whether this court has jurisdiction over VIA's cross-appeal.

DISCUSSION

We review a district court's grant of summary judgment de novo, Ethicon Endo Surgery, Inc. v. U.S. Surgical Corp., 149 F.3d 1309, 1315 (Fed. Cir. 1998), and its denial of summary judgment for abuse of discretion, Elekta Instrument S.A. v. O.U.R. Scientific Int'l, Inc., 214 F.3d 1302, 1306 (Fed. Cir. 2000). We review a district court's legal conclusions, such as claim and contract construction, de novo.

I

Intel asks this court to reverse the district court's non-infringement decision because, Intel asserts, the district court (A) erred in its interpretation of the AGP license agreement to include the '291 patent, which claims Fast Write; (B) erred by applying the contra proferentum doctrine; and (C) misused extrinsic evidence. After considering each of Intel's arguments, for the reasons set forth below, we hold that, although Intel's interpretation of the AGP license is not unreasonable, the district court did not err in concluding that the license covers Fast Write and granting summary judgment of noninfringement for VIA.

A

The license agreement expressly provides that it is governed by Delaware law. Under Delaware law, "[c]ontract terms themselves will be controlling when they establish the parties' common meaning so that a reasonable person in the position of either party would have no expectations inconsistent with the contract language." Eagle Indus., Inc. v. DeVilbiss Health Care, Inc., 702 A.2d 1228, 1232 (Del. 1997). However, "[w]hen the provisions in controversy are fairly susceptible of different interpretations or may have two or more different meanings, there is ambiguity." Id.

The key issue here is whether the AGP license agreement can be interpreted to include the Fast Write protocol and hence the '291 patent, i.e., whether the words "disclosed in, and required by" in the license agreement must be interpreted to exclude "optional" interfaces or protocols disclosed in the AGP Specifications. VIA asserts that the '291 patent is one that must be infringed in order to comply with the electrical interfaces and signal protocols "disclosed in, and required by" the Fast Write protocol of the AGP 2.0, and thus is covered by the license. Intel argues that Fast Write is an optional protocol and therefore, although "disclosed in," it is not also "required by" AGP 2.0. The district court concluded that VIA's interpretation is reasonable and Intel's interpretation unreasonable. Intel, 174 F. Supp. 2d at 1048-50.

Although a close question, ultimately we agree with the district court that VIA's reading of the agreement is a reasonable one. However, we also conclude that Intel's interpretation of the license agreement is reasonable as well. Because the agreement is "fairly susceptible of different interpretations," Eagle Indus., 702 A.2d at 1232, there is ambiguity as to whether Fast Write, an optional protocol, is licensed.

VIA reads the license as extending to all protocols specified in AGP 2.0 between a graphics chip and a core logic, whether the protocol is labeled "optional" or not, although not to chips unrelated to graphics or ports other than the AGP port. This reading is not unreasonable. The license agreement does not state that optional features of AGP 2.0 are not licensed or that the license only covers baseline features. In the license agreement, the word "specifications" that are "required by" can be read as including all specifications that are "described in the documents entitled" AGP 1.0 and 2.0, including the optional Fast Write protocol specification. Furthermore, in AGP 2.0, the Write Buffer Full (WBF#) signal, used only in the Fast Write protocol, is labeled as R, meaning "required." AGP 2.0 Interface Specification, at 41, tbl. 3-11.

Intel, on the other hand, reads the license as excluding protocols identified in AGP 2.0 as optional. Intel's reading is not unreasonable, either. As Intel states, the plain meaning of the word "required" is the opposite of that of the word "optional." Thus, "optional" features are not "required." In AGP 2.0, the Specification clearly defines that, like data transfers at 4x, Fast Write is an optional protocol. AGP 2.0 Interface Specification, at 33. As a result, Fast Write is not "required by" AGP 2.0 and, therefore, not covered by the AGP license agreement.

Although we agree with Intel that its reading of the plain meaning of "required by" is a reasonable one, we disagree that its reading is the only reasonable one. First, the words "required by" without any clarification could mean either non-optional protocols of AGP 2.0 or electrical interfaces or protocols that are required to perform any specification "described" in AGP 2.0, including non-optional protocols for an optional specification. For example, books "required by" a school could mean books needed for (1) "required" (non-optional) classes; or (2) any class taken, including optional classes. Second, the word "required" as used by Intel in AGP 2.0 does not always correlate to non-"optional." For example, the signal WBF# is labeled as R (required) even though it is only used in an optional protocol. AGP 2.0 Interface Specification, at 41, tbl. 3-11. Conversely, as the district court noted, features or mechanisms labeled as "optional" in AGP 1.0 and 2.0 were conceded by Intel as "required" or licensed. See Intel, 174 F. Supp. 2d at 1049-50 (stating, as one example, that "optional mechanisms that allow address demultiplexing," AGP 1.0, at 9, were admitted by Intel to refer to a "required" protocol). Third, although Intel argues that features required (meaning 1) for an optional protocol to work would not turn the optional protocol into a required (meaning 2, non-optional) one, this is not the point of contention here. VIA does not dispute that Fast Write is an optional protocol and is not required for compliance with the basic AGP 2.0 standard. VIA simply reads the words "required by" in the one-page license agreement as conveying meaning 1 rather than meaning 2 above. Nowhere

does the license agreement or AGP 2.0 clearly link the words "required by" in the license agreement to non-optional (meaning 2) protocols of AGP 2.0. The word "optional" does not occur anywhere in the license agreement. In AGP 2.0, as discussed above, the symbol for the word "required" (R) is used for required features of optional protocols.

Thus, we conclude that VIA's and Intel's interpretations are both reasonable readings of the license agreement. The district court erred in holding that VIA's reading of the agreement is the only reasonable one. Nevertheless, it was harmless error because, as there is ambiguity in the agreement, the district court properly granted summary judgment of noninfringement relying on contra proferentum.

B

Intel argues that the district court erred by applying contra proferentum, which, it asserts, is a doctrine only of "last resort" that must not be applied when "a problem in construction can be resolved by applying more favored rules of construction," citing E.I. duPont deNemours & Co., Inc. v. Shell Oil Co., 498 A.2d 1108, 1114 (Del. 1985). We reject Intel's argument and hold that based upon contra proferentum the district court properly determined the applicability to the '291 patent of the license agreement.

When a contract is ambiguous, the principle of contra proferentum, under Delaware law, requires that the agreement be construed against the drafter who is solely responsible for its terms. SI Mgmt., L.P. v. Wininger, 707 A.2d 37, 43 (Del. 1998). Contra proferentum has been held determinative in resolving ambiguity in a contract that, like the agreement here, is drafted by one party and offered on a "take it or leave it" basis without meaningful negotiations. Id. at 43-44. Thus, the court declined to rely on extrinsic evidence but, resolved the ambiguity based solely on contra proferentum. Id.

Intel's reliance on E.I. duPont deNemours is inapposite. In that case, the court did not apply contra proferentum because it was able to determine the meaning of the contract through applying normal rules of construction. E.I. duPont deNemours, 498 A.2d at 1114-17. Additionally, that court stated "the justification for applying such rule pales in a situation, like the instant one, where the terms of an agreement resulted from a series of negotiations between experienced drafters." Id. at 1114. Here, Intel alone drafted the agreement and had complete control over the language of its terms. Intel offers the reciprocal license on a "take it or leave it" basis and is bound by anyone who signs and submits the agreement. There was no negotiation between the parties. Thus E.I. duPont deNemours is readily distinguishable. Given that both VIA's and Intel's interpretations are reasonable readings of the agreement, the ambiguity arising from the varying uses of the words "required by" has to be resolved against Intel.

Intel's assertion that the district court erred in applying contra proferentum is not supported. Contrary to what Intel asserts, the district court did not use contra proferentum as a substitute or "short cut" to avoid analyzing the contractual language. The court construed the language of the agreement insofar as possible before discussing contra proferentum. Compare Intel, 174 F. Supp. 2d at 1044-50, with id. at 1050-52. Moreover, the court properly rejected Intel's "last resort" argument because in Delaware, SI Mgmt., 707 A.2d at 43, contra proferentum is applied to resolve an ambiguity without first resorting to extrinsic evidence.

We thus hold that the district court's application of contra proferentum was not error. Further, the ambiguity in the non-negotiated license agreement is properly resolved against Intel based on contra proferentum; thus, the license agreement does indeed cover Fast Write.

C

Intel also argues that the district court erred in relying on certain of the conflicting extrinsic evidence on summary judgment to resolve ambiguity of the license language adversely to Intel. The district court indeed discussed extrinsic evidence, but only after interpreting the license

agreement and applying contra proferentum. Moreover, it noted that "[i]t is unnecessary, in light of the foregoing, to try to resolve any ambiguities by reference to extrinsic evidence." Intel, 174 F. Supp. 2d at 1052. The court further stated that after considering "all the undisputed extrinsic evidence and taking the disputed facts in the light most favorable to Intel, the summary-judgment record still does not raise a question of fact contrary to the foregoing construction." Id.

We agree with the district court that the dispute regarding the coverage of the license agreement is properly resolved after interpreting the contract and, upon finding of any possible ambiguity, applying contra proferentum; reliance on extrinsic evidence was not and is not necessary. See SI Mgmt., 707 A.2d at 43. Furthermore, the district court did not err in assessing the extrinsic evidence. The court simply attempted to search for genuine issues of material facts contrary to its tentative conclusion drawn from "undisputed" evidence. The court found none. Intel apparently views the court's finding that the extrinsic evidence presented did not raise a genuine issue of material fact as the court's dispositive ground for interpreting the license in favor of VIA. That was not the case and is nowhere supported by the record before us.

D

In summary, as to infringement, we conclude that VIA's and Intel's respective interpretations of the AGP license agreement are both reasonable, thus creating an ambiguity which under Delaware law is to be resolved by applying contra proferentum. The district court thus properly applied contra proferentum to resolve the ambiguity in this non-negotiated agreement, which was solely written by Intel. Further, the court reached its conclusion without relying on disputed extrinsic evidence, and therefore its discussion of that evidence cannot constitute legal error. Thus, we hold Fast Write is covered by the AGP license. As a result, VIA cannot be liable for infringing the '291 patent, as the district court correctly held.

II

VIA cross-appeals the district court's decision regarding the validity of the '291 patent. More specifically, VIA contends that claim 1 of the '291 patent is invalid due to claim indefiniteness.[1] Before treating the merits of the issue, we first address Intel's argument that we lack appellate jurisdiction over VIA's cross-appeal.

A

The district court in a November 20, 2001, order denied VIA's motion for summary judgment of invalidity of the '291 patent and denied-in-part and granted-in-part Intel's cross-motion for summary judgment of validity. Intel, C 99-03062, slip op. at 12 (order denying VIA's motion for summary judgment). The district court granted Intel's motion for summary judgment on the issues of enablement, best mode, and "linking," but denied both VIA's motion for summary judgment of indefiniteness and Intel's cross-motion on the same issue. Id. at 6-12. Because the denial of a motion for summary judgment is "interlocutory, nonfinal, and nonappealable," Gerber Garment Tech. v. Lectra Sys., Inc., 916 F.2d 683, 686 (Fed. Cir. 1990), Intel asserts that this court does not have jurisdiction over VIA's cross-appeal.

We hold that this court does have jurisdiction over the cross-appeal, because VIA is appealing the district court's stipulated final judgment against it on its counter-claim for a declaratory judgment of invalidity, rather than the court's order denying its motion for summary judgment. The parties stipulated to, inter alia, a final judgment in favor of Intel on VIA's counterclaim for a declaratory judgment of invalidity of the '291 patent, pursuant to the district court's November 20, 2001, order denying VIA's motion for summary judgment. One day after the parties signed the stipulation "disposing of this entire case," the district court entered a final

[1] Claim 1, the only independent claim of the '291 patent, is the claim on appeal. We do not need to address the rest of the dependant claims as we find claim 1, the broadest claim, is not indefinite.

judgment as the parties stipulated. Thus, it is the court's final judgment from which both parties are appealing.

Because without question we have direct jurisdiction over an appeal of a district court's final judgment -- here regarding VIA's counterclaim for a declaratory judgment of invalidity -- it is unnecessary to address arguments regarding pendent appellate jurisdiction.

B

We next address VIA's argument that claims of the '291 patent were proven invalid due to claim indefiniteness. "A determination of claim indefiniteness is a legal conclusion that is drawn from the Court's performance of its duty as the construer of patent claims." Personalized Media Communications, LLC v. Int'l Trade Comm'n, 161 F.3d 696, 705 (Fed. Cir. 1998). Thus, like claim construction, a district court decision on claim indefiniteness is reviewed de novo. Id. at 702-03.

Claim 1 is the only independent claim of the '291 patent. Claim 1 reads:

> 1. An interface for between a system memory controller and a peripheral device, said interface comprising:
>
> an element adapted to selectively write data directly to said peripheral device at one of at least two rates; and
>
> a selection device adapted to determine whether data is able to be written directly to said peripheral device, said device adapted to allow an initial and a subsequent transaction and to control whether or not a subsequent transaction occurs by indicating whether or not a write buffer in the peripheral device is able to accept sufficient information after the initial block has transferred.

'291 patent (emphases added). After a one-day claim construction hearing, the district court held that the recitations in claim 1 were means-plus-function limitations and that the structure corresponding to the functions was the core logic of a computer adapted to perform Fast Write. Intel, C 99-03062, slip op. at 3 (order denying VIA's motion for summary judgment). The court also held that the protocol used to perform Fast Write was part of the corresponding structure as well. That protocol includes the signal WBF#, which indicates that the graphics device's write buffer is full so that the core logic will not initiate new data writing. That protocol optimizes direct writing of data to graphics chips by timing transmission to when the peripheral device is able to receive such data as confirmed by the signals testing the present capacity of the "write buffer in the peripheral device."

VIA argues that claim 1 is indefinite because the specification of the '291 patent does not disclose adequate structure corresponding to the functions recited in claim 1, resulting in an "unbounded" claim that encompasses all means for performing the claimed functions. Along the same line VIA also argues that the specification does not clearly link any structure to the functions recited in the claim, a contention rejected by the district court decision granting summary judgment to Intel on "linking."

Whether the specification adequately sets forth structure corresponding to the claimed functions must be considered from the perspective of one skilled in the art. Budde v. Harley-Davidson, Inc., 250 F.3d 1369, 1376 (Fed. Cir. 2001). Any fact critical to a holding on indefiniteness, moreover, must be proven by the challenger by clear and convincing evidence. See id. at 1376-77. In this case, VIA needed to prove, by clear and convincing evidence, that the specification lacks adequate disclosure of structure to be understood by one skilled in the art

as able to perform the recited functions.

We agree with the district court that the core logic of a computer modified to perform Fast Write is the corresponding structure for the functions recited. Modification of the core logic is the element that is adapted to write data directly to a peripheral device. '291 patent, col. 7, ll. 11-12 and col. 8, l. 62-col. 9, l. 10. The core logic is also adapted to determine whether data can be written directly to the peripheral device, depending on whether the signal WBF# (write buffer full) is asserted or de-asserted. Id. col. 7, ll. 31-37 and col. 10, ll. 25-29. Thus, the core logic, as described in the specification and adapted both to write directly and to react to WBF#, is the structure corresponding to the two functions recited in claim 1.

VIA does not dispute that the core logic can be modified to perform Fast Write; instead, VIA contends that a generic core logic is an inadequate disclosure of structure because no circuitry is disclosed in the patent to show how the core logic is modified.[2] We hold that the '291 patent is not indefinite merely because no specific circuitry is disclosed to show the modification. There is much supporting precedent. For example, in S3, Inc. v. NVIDIA Corp., 259 F.3d 1363, 1370-71 (Fed. Cir. 2001), this court held that a "selector" was an adequate corresponding structure for performing the "selectively receiving" function even though neither the electronic structure of the selector nor details of its electronic operation were described in the specification. Similarly, in In re Dossel, 115 F.3d 942, 946-47 (Fed. Cir. 1997), the court held that the structure corresponding to the "reconstructing" function was adequately described although the written description only disclosed a device that received digital data, performed mathematical computations and output the results to a display. The structure was determined to be a general-purpose computer, even though the word "computer" was not used in the

[2] VIA's argument focuses solely on indefiniteness under 35 U.S.C. § 112, ¶ 2. Enablement is conceded and not an issue before us.

specification and no computer code was quoted. Id. Here, the specification of the '291 patent includes three diagrams, 35 signal charts and a detailed written description explaining the invention. A generic description of the core logic, as adapted to practice Fast Write pursuant to the specification, is not inadequate solely because no circuitry is disclosed on how to modify the core logic.

VIA also argues that claim 1 is indefinite because there may be unlimited numbers of implementations that can modify the core logic to perform the recited functions and the patent does not disclose circuitry or other structure on any of the implementations so the universe of such implementations is undefined. We disagree. In Dossel, there could be multiple ways for the computing device to reconstruct the data because no specific mathematical algorithm was disclosed in the written description, although the description stated that "known algorithms" could be used to solve standard equations known in the art. Id. at 946. In the present case, how to modify the core logic to perform Fast Write on the circuitry level may also be properly left to the knowledge of those skilled in the art, and need not be specified in the patent. Intel, C 99-03062, slip op. at 10-12 (order denying VIA's motion for summary judgment).

VIA asserts that such a conclusion conflicts with the terms set forth by Congress in 35 U.S.C. § 112, ¶ 6, which, while allowing such claims, limits the scope of a means-plus-function claim limitation to the specific structures disclosed in the specification and their equivalents. VIA also notes that the patent law encourages competitors to design around existing patents, therefore, necessitating a definite scope of a patent. We agree with VIA about the law, but disagree with VIA's arguments about the proper application of the law to the present case. The novelty of the invention as claimed in the '291 patent lies in the signal protocol for implementing Fast Write, i.e., use of the signal WBF#, not in unclaimed circuitry for carrying out the specified

protocol. Thus, one may design around the invention by using another signal protocol, but not by simply changing a circuit that uses the same signal protocol.[3] By analogy, if a chair is disclosed in the specification that corresponds to the "means for seating" limitation in a claim, asserting that there are infinite numbers of structures that could make a chair or there are unlimited types of chairs in the world would not necessarily make the claim indefinite.

Having determined that the core logic modified to perform Fast Write by writing directly to the peripheral device and using the WBF# signal protocol disclosed in the specification are the structures corresponding to the functions recited, we hold that claim 1 of the '291 patent was not shown invalid for indefiniteness. First, claim 1 is not indefinite as construed from intrinsic evidence, therefore reference to extrinsic evidence is improper. When an analysis of intrinsic evidence resolves any ambiguity in a disputed claim term, it is improper to rely on extrinsic evidence to contradict the meaning so ascertained. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1583 (Fed. Cir. 1996). "Only if there were still some genuine ambiguity in the claims, after consideration of all available intrinsic evidence, should the trial court have resorted to extrinsic evidence, such as expert testimony, in order to construe claim 1." Id. at 1584. Second, to the extent there is any "genuine ambiguity" in the scope of the claim, which is not the case here, the evidence on record does not show that VIA can prove indefiniteness by clear and convincing evidence. VIA's expert made a conclusory statement that the '291 patent did not disclose adequate structure for one skilled in the art to determine the scope of the claims, while Intel's expert opined that one skilled in the art would understand the claim to cover interface circuitry having the functional properties described in those claims.

[3] We note that every one of the four structures identified by VIA's expert as corresponding to the recited functions of claim 1 includes the WBF# signal.

We thus conclude that the district court properly determined the two structures corresponding to the two functions recited in claim 1 and that they are adequate to avoid indefiniteness. Although the district court first denied VIA's motion for summary judgment of indefiniteness as well as Intel's cross-motion, it properly entered final judgment of non-invalidity in favor of Intel. For the reasons stated above and based on the record before us, we affirm the stipulated final judgment against VIA on VIA's counterclaim for a declaratory judgment of invalidity.

CONCLUSION

We hold that the district court correctly concluded that VIA cannot be liable for infringing the '291 patent due to applicability of the express license agreement, which as correctly construed covers the '291 patent, although we base our conclusion solely on contra proferentum after determining that as to the critical terms the agreement is indeed ambiguous. We also hold that the district court properly identified the structures corresponding to the functions recited in claim 1 and that the structures are sufficiently specific. Thus, claim 1 is not indefinite. Accordingly, the judgment of the district court is, in all respects challenged on appeal and cross-appeal,

AFFIRMED.