UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

EIDOS DISPLAY, LLC, and EIDOS III, LLC	§	**SEALED**
v.	§	**No. 6:11-cv-00201-LED-JDL**
AU OPTRONICS CORPORATION, et al.	§	

SEALED REPORT AND RECOMMENDATION OF UNITED STATES MAGISTRATE JUDGE

Before the Court is Defendants AU Optronics Corporation ("AUO"), Chi Mei Innolux Corporation ("Innolux"), Chunghwa Picture Tubes, Ltd., HannStar Display Corporation, and Hannspree North America, Inc.'s (collectively, "Defendants") Motion for Summary Judgment of Indefiniteness (Doc. No. 314) ("Motion"). Plaintiff Eidos Display, LLC, and Eidos III, LLC, ("Eidos") filed a Response (Doc. No. 316) ("Response"). Defendants filed a Reply (Doc. No. 320) and Eidos filed a Surreply (Doc. No. 329). Having considered the parties' submissions and for the reasons stated below, the Court **RECOMMENDS** that Defendants' Motion for Summary Judgment be **GRANTED.**

BACKGROUND

Eidos alleges Defendants infringe claim 1 of U.S. Patent No. 5,879, 958 ("the '958 Patent"). The '958 Patent is titled "Method of Producing an Electro-Optical Device" and relates to the process of forming circuitry used in controlling liquid crystal displays ("LCD"). Specifically, the '958 patent relates to the process for forming an array of thin film transistors ("TFT") and pixel electrodes that are used to control the light emission of an LCD. The '958 Patent contains 17 embodiments (identified as A-S) providing various

manufacturing processes that reduce the number of photolithographic steps. *See* '958 Patent 4:50–14:18 (describing processes with four or five lithographic steps as opposed to seven).

Claim 1 is the only issued claim in the '958 Patent and recites as follows:

1. A method for producing an electro-optical device in which an electro-optical material is put between a pair of substrates opposed to each other, at least a portion of opposing surfaces of the substrates is insulative, a plurality of source wirings and a plurality of gate wirings are formed crossing each other on the surface of one of said pair of substrates and a transparent pixel electrode and a thin film transistor are formed at each of the crossing points between the source wirings and the gate wirings, wherein the method comprises:
    - a step G1 of forming a first metal film on the surface of said one substrate, a first photolithographic step G2 of patterning the first metal film to form a gate electrode and a gate wiring,
    - a step G3 of forming a first insulator film, a semiconductor film and an ohmic contact film on the surface of said one substrate after the first photolithographic step,
    - a second photolithographic step G4 of patterning the semiconductor active film and the ohmic contact film to form a semiconductor portion above the gate electrode in a state isolated from other portions,
    - a step G5 of forming a second metal film on the surface of said one substrate after the second photolithographic step,
    - a third photolithographic step G6 of patterning the second metal film and ohmic contact film to form a source electrode, a drain electrode and a channel portion,
    - a step G7 of forming a passivation film on the surface of said one substrate after the third photolithographic step, and

> a fourth photolithographic step G8 of patterning the passivation film to form a contact hole reaching the gate wiring, a contact hole reaching the drain electrode and a contact hole for source wiring and gate wiring connection terminals,
> a step G9 of forming a transparent conductive film on the surface of the substrate after the fourth photolithographic step, and
> a fifth photolithographic step G10 of patterning the transparent conductive film to form a transparent pixel electrode.

'958 patent 58:5-47.

During the course of this litigation, the parties have proposed the following three constructions for the fourth photolithographic step G8 ("G8 step") with the constructions of the key limitation in bold:[1]

Party	**Proposed Construction of G8 Step**
Defendants	"Plain meaning, which is removing portions of the passivation film to form a first opening exposing a portion of the gate wiring, a second opening exposing a portion of the drain electrode, **and a third opening for source wiring and gate wiring connection terminals.**"
Eidos	"removing portions of the passivation film to form an opening exposing a portion of the gate wiring, an opening exposing a portion of the drain electrode, **an opening for a source wiring connection terminal and an opening for a gate wiring connection terminal.**"
Innolux	"patterning the passivation film to form a contact hole reaching the gate wiring, to form a contact hole reaching the drain electrode, **to form a contact hole for source wiring and to form gate wiring connection terminals.**"

The Court finds that this limitation is ambiguous and the intrinsic record fails to resolve this ambiguity for the reasons stated below.

[1] The Court has made multiple attempts at construction, each time reviewing relevant portions of the specification, file history, and the reexamination record (Doc. Nos. 149, 153, 159, 192, 194 (claim construction briefing); 184, 192, 194, 208, 293, 301 (claim construction orders and objections); 274-1, 284-1, 287-1 (letter briefs) and 297, 298, 299, & 300 (briefing on Innolux's proposed construction)).

During claim construction, Eidos argued that the claim requires one hole for source wiring connection terminals and a separate connection hole for gate wiring connections terminals. (Doc. No. 184 at 7) ("*Markman* Order"). Defendants argued that the plain language of the claim required the same contact hole for source wiring and gate wiring connection terminals. *Id.* at 8. The Court found that "while the claim language raises ambiguity regarding the contact holes, neither party's construction is supported by the specification." *Id.* at 10. Thus, the Court found that "the issue of whether there are three or four holes, and whether those corresponding holes are separate and distinct, is not ripe for claim construction, as the dispute presented centers around theories of invalidity pursuant to 35 U.S.C. § 112." *Id.* at 11.

Defendant Innolux subsequently proposed a third construction for the G8 step, encompassing three-holes and adding the formation of the structure "gate wiring connection terminals." (Doc. No. 271-1 at 3). The Court requested briefing on this construction from the parties. Upon consideration, the Court ultimately rejected the third proposed construction (Doc. No. 301).

Due to the multiple failed efforts at construction, the Court requested briefing on whether the language at issue is indefinite. Accordingly, Defendants now request summary judgment of invalidity based on indefiniteness, "as the key limitation remains insolubly ambiguous after multiple attempts at construction, each of which included a complete review of the relevant portions of the specification, file history, and the reexamination record." MOTION at 1. Eidos opposes, arguing that the term is not indefinite, and is understood by persons of ordinary skill in the art. RESPONSE at 1.

LEGAL STANDARD

I. Summary Judgment Standard

"Summary judgment is appropriate in a patent case, as in other cases, when there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law." *Nike Inc. v. Wolverine World Wide, Inc.*, 43 F.3d 644, 646 (Fed. Cir. 1994); FED. R. CIV. P. 56(c).

II. Indefiniteness

A party seeking to invalidate a patent must overcome a presumption that the patent is valid. *See* 35 U.S.C. § 282; *Microsoft Corp. v. i4i Ltd. Partnership*, -- U.S. ----, 131 S. Ct. 2238, 2243 (2011); *United States Gypsum Co. v. National Gypsum Co.*, 74 F.3d 1209, 1212 (Fed. Cir. 1996). This presumption places the burden on the challenging party to prove the patent's invalidity by clear and convincing evidence. *Microsoft*, 131 S.Ct. at 2243; *United States Gypsum Co.*, 74 F.3d at 1212. Close questions of indefiniteness "are properly resolved in favor of the patentee." *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1348 (Fed. Cir. 2005); *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1380 (Fed. Cir. 2001).

Claims must particularly point out and distinctly claim the invention. "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112 ¶ 2. The primary purpose of the requirement of definiteness is to provide notice to those skilled in the art of what will constitute infringement. *See United Carbon Co. v. Binney Co.*, 317 U.S. 228, 236 (1942). The definiteness standard is one of reasonableness under the circumstances, requiring that, in light of the teachings of the prior art and the invention at issue, the claims apprise those skilled in the art of the scope of the invention with a reasonable degree of precision and particularity. *See*

Shatterproof Glass Corp. v. LibbeyOwens Corp., 758 F.2d 613, 624 (Fed. Cir. 1985). To rule "on a claim of patent indefiniteness, a court must determine whether one skilled in the art would understand what is claimed when the claim is read in light of the specification." *Bancorp. Servs., L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1372 (Fed. Cir. 2004). "A determination of indefiniteness is a legal conclusion that is drawn from the court's performance of its duty as the construer of patent claims, [and] therefore, like claim construction, is a question of law." *Amtel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1378 (Fed. Cir. 1999).

DISCUSSION

As stated above, Defendants contend that the sole claim of the '958 patent is indefinite under 35 U.S.C. § 112 ¶ 2. MOTION AT 1. Defendants argue that the claim language "a contact hole for source wiring and gate wiring connection terminals" is insolubly ambiguous because (1) the specification does not resolve the ambiguity and (2) the disputed claim language is not amenable to a plausible and supported construction. *See id.* at 3, 7. Eidos argues that the term is not indefinite, that it is understood by persons of ordinary skill in the art, and invites the Court to conduct further construction. RESPONSE at 1-2.

Based on the claim language of step G8 and consistent with the parties' proposed constructions, one of skill in the art could (1) create separate contact holes for gate wiring connection terminals and source wiring connection terminals, (2) create a common contact hole for source wiring and gate wiring connection terminals, or (3) create a contact hole for source wiring in the same step as forming the gate wiring connection terminals. As discussed below, the intrinsic record fails to indicate which construction is correct leaving the disputed claim language insolubly ambiguous.

I. Eidos' Proposed Construction

The G8 step of Claim 1 reads "…a contact hole for source wiring and gate wiring connection terminals" '958 Patent 58:40-41. During claim construction, Eidos argued that this portion of the G8 step calls for "separate openings for the source wiring connection terminal and the gate wiring connection terminal." *Markman* Order at 7. However, neither the plain language of the G8 step in Claim 1 nor the specification discloses the creation of separate and distinct contact holes for source wiring and gate wiring connection terminals. '958 Patent 36:27-33 (describing G8 as "a contact hole 210 leading to the drain electrode 207, a contact hole 211 leading to the gate wiring 193 and a contact hole 212 leading to the source wiring 206"). Such an interpretation would require the "a" in "…a contact hole for source wiring and gate wiring connection terminals" to mean "separate," which it does not. Rather than relying on the portion of the specification describing the G8 step, Eidos relied on a portion of the specification describing the fourth photolithographic step D8, which reads "…a contact hole 132 for a source wiring connection terminal and a contact hole for a gate wiring connection terminal…" '958 Patent 31:50-52. The D8 step is the only embodiment within the '958 patent to disclose separate contact holes for the gate wiring and source wiring connection terminals. *Markman* Order at 8. The D8 step, however, does not disclose the formation of a contact hole reaching the drain electrode as disclosed in the G8 step. Specifically, the G8 step is described as "a contact hole 210 leading to the drain electrode 207, a contact hole 211 leading to the gate wiring 193 and a contact hole 212 leading to the source wiring 206." '958 Patent 36:27-33. The D8 step demonstrates that if the inventors had wanted to describe separate contact holes formed in the G8 step, they could have done so. As written, the G8 step fails to delineate the formation of separate contact holes for the source wiring and gate wiring connection terminals. Moreover, the D8 step

does not appear to correspond to step G8 because a separate step, D4, is used to form the contact hole reaching the gate wiring. '958 Patent 31:4-9. Thus, the specification provides no teaching of a single photolithographic step of patterning a passivation film to form the four openings sought by Eidos: an opening exposing a portion of the gate wiring, an opening exposing a portion of the drain electrode, an opening for a source wiring connection terminal, and an opening for a gate wiring connection terminal.

In their opposition, Eidos argues that the claim language is not indefinite because Defendants argued at claim construction that the term should be "construed following its 'plain and ordinary meaning.'" RESPONSE at 1-3. Such an argument fails to sufficiently acknowledge that the Court rejected Defendant's proposal, finding that it lacked support in the specification. In addition, Eidos fails to show where or how the specification supports a "plain and ordinary meaning" of the disputed term, distinguishing the present litigation from the cases cited by Eidos. *IP Innovation, LLC v. Red Hat, Inc.* No. 2:07-cv-447, 2009 WL 2460982, at *10 (E.D. Tex. Aug. 10, 2009); *Emcore v. Optium Corp.*, No. 6-1202, 2008 WL 3271553, at *7-8 (W.D. Pa. Aug. 5, 2008) (both holding that the specification provided support to define and construe the disputed claim language). Thus, the Court finds that neither the claim language nor the specification supports Eidos' construction of separate openings for the source wiring connection terminal and the gate wiring connection terminal.

II. Defendants' Proposed Construction

During claim construction, Defendants argued a construction with a common hole for both source wiring and gate wiring connection terminals. *Markman* Order at 8. This construction would have required the Court to interpret "…a contact hole for the source wiring and the gate wiring connection terminals" to mean the same hole for both the source wiring and

the gate wiring connections. As explained in the *Markman* Order, whether or not "a" as used in Claim 1 means "the same" or "separate" is unclear and the specification fails to provide support for either interpretation. *Id.* at 8-9. Further, the Court was unable to locate support in the specification "for a common contact hole for both the source wiring and gate wiring connection terminals formed in a single step along with a contact hole reaching the gate wiring and a contact hole reaching the drain electrode" as required in the fourth photolithographic step of Claim 1. *Id.* at 11.

III. Innolux's Proposed Construction

In requesting leave to file a motion for summary judgment of noninfringment, Defendant Innolux proposed the following construction: "patterning the passivation film to form a contact hole reaching the gate wiring, to form a contact hole reaching the drain electrode, to form a contact hole for source wiring and to form gate wiring connection terminals" (Doc. No. 273-1). The Court invited the parties to provide their responses (Doc. No. 293). Innolux's proposed construction required the gate wiring terminals to be formed from the passivation film, which is an insulating material. '958 Patent 26:4-8; 31:36-38; 33:33-35; 55:40-43. The specification, however, describes the connection terminals as being made of a conductive material. '958 Patent 36:35-45; 38:9-19. Therefore, the connection terminals cannot be formed from an insulating material as required by Innolux's proposed construction. Thus, the Court declined to adopt this proposed construction (Doc. No. 301).

IV. Reexamination

The patent examiner confirmed the ambiguity in the claim language during reexamination in noting that "[t]he claim feature that was found important to the patentability of claim 1 … is unclear in at least two regards." NON-FINAL OFFICE ACTION at 3 (Doc. No. 314,

Ex. 5). He further states that "[t]he problem arises because there is no 'a contact hole for source wiring and gate wiring connection terminals' as recited in the claim…the language literally states that there is a single contact hole for both the source wiring and gate wiring terminals…[but] the claim language implicitly requires separate contact holes for the source wiring and gate wiring connection terminals." *Id.* at 4. While Eidos argues that the examiner was able to "understand the term," the language above clearly shows that the claim language is seeded with ambiguity surrounding the use of the indefinite article "a" followed by both the source wiring and gate wiring terminals. Thus, the reexamination does not aid in the resolution of the parties' dispute.

V. Expert Reports

Eidos argues in their opposition that the language at issue is not indefinite because various experts have opined as to the proper claim construction. Defendants' expert reports, however, demonstrate the ambiguity. For example, Defendants' expert Roger Stewart states that the "literal language [of the claim] might be in error" and that he "was unable to identify another claim interpretation that is consistent with embodiments of the '958 Patent without requiring substantial alterations of the literal claim language." (Doc. No. 314, Ex. 1 at ¶37-38) (emphasis added). He further states that "[t]his specification disclosure cannot be reconciled with the language of the G8 step of Claim 1 without significantly altering the claim language." *Id.* at ¶45.

Defendant AUO's expert, Dr. Aris Silzars, supports Defendants' proposed construction, stating that "the specification of the '958 patent fails to describe anywhere the formation of four separate contact holes in a single photolithographic step." (Doc. No. 314, Ex. 2 at ¶208). He also agrees that while a common contact hole "could be a viable interpretation by a person of ordinary skill in the art … I do not agree it comports with the plain meaning of the claim language." *Id.* Qualifying a construction as "viable" is hardly definite. Defendant Innolux's

expert, Jerzy Kanicki, notes that neither construction was appropriate and offered the alternative construction later proposed by Innolux discussed supra (Doc. No. 314, Ex. 3 at ¶¶21, 23-24).

Eidos' expert reports support their previously discussed construction that the fourth photolithographic G8 step calls for separate and distinct contact holes for source wiring and gate wiring connection terminals (Doc. No. 316-2, Ex. A, Decl. of Elliott Schlam; Doc. No. 316-3, Ex. B, Decl. of Bruce Smith). The Court acknowledges that Eidos' construction is a reasonable option and that a person of ordinary skill in the art may be able to fashion an application of the grammatically ambiguous claim language. However, the standard is not whether a person of ordinary skill in the art can fashion an application of the term, but whether in light of the intrinsic record such a person can ascertain the scope of the invention with a reasonable degree of precision and particularity. *See Shatterproof Glass,* 758 F.2d at 624. For the reasons discussed above, the Court finds that the intrinsic record does not resolve the ambiguity of the language in the G8 step, and the interpretation sought by Eidos' expert does not conform to the specification. Overall, the expert reports merely highlight the ambiguity in the term at issue.

VI. Eidos' New Proposal

In their opposition, Eidos has invited the Court to conduct further claim construction, combining the prior proposed constructions and piecing them together into a construction that reads "an opening, common or separate, for source wiring and gate wiring connection terminals." RESPONSE at 9. Rather than resolving the ambiguity, this interpretation compounds the ambiguity by interpreting the claim to mean either Defendants' original construction (same contact hole) or Eidos' original construction (separate contact holes). Further, it is unsupported by the specification for the same reason the original constructions were unsupported. Throughout this litigation, Eidos has been given ample opportunity to resolve the ambiguities

and provide a construction compatible with the claim language and specification, but they have been unable to do so. The Court finds that at this stage in the litigation, the term at issue cannot be construed to a point where infringement and invalidity analysis can take place.

CONCLUSION

Despite three proposed constructions, the Court is unable to arrive at a construction that would allow a person of ordinary skill in the art to determine "what is claimed when the claim is read in light of the specification." *Bancorp,* 359 F.3d at 1372. The intrinsic record fails to indicate which option is correct in the context of the language of Claim 1. Forcing a court to guess which interpretation to adopt is "beyond its authority." *Novo Industries, L.P. v. Micro Molds Corp.,* 350 F.3d 1348, 1358 (Fed. Cir. 2003). Further, a guess by a court in constructing a claim defeats the required notice function. *S3 Inc. v. nVIDIA Corp.*, 259 F.3d 1364, 1371-72 (Fed. Cir. 2001). Thus, the claim is insolubly ambiguous. A claim is invalid as indefinite if the claim is insolubly ambiguous. *Honeywell Int'l v. Int'l Trade Comm'n,* 341 F.3d 1332, 1338-39 (Fed. Cir. 2003). A legal conclusion of indefiniteness under § 112, ¶2 is appropriate for resolution at summary judgment. *Datamize,* 417 F.3d at 1347. Thus, summary judgment is appropriate. Accordingly, the Court **RECOMMENDS** that Defendants' Motion for Summary Judgment of Invalidity for Indefiniteness be **GRANTED**.

Within fourteen (14) days after receipt of the Magistrate Judge's Report, any party may serve and file written objections to the findings and recommendations contained in the Report. A party's failure to file written objections to the findings, conclusions and recommendations contained in this Report within fourteen (14) days after being served with a copy shall bar that party from *de novo* review by the district judge of those findings, conclusions and recommendations and, except on grounds of plain error, from appellate review of unobjected-to

factual findings and legal conclusions accepted and adopted by the district court. *Douglass v. United States Auto. Ass'n*, 79 F.3d 1415, 1430 (5th Cir. 1996).

So ORDERED and SIGNED this 3rd day of December, 2013.

JOHN D. LOVE
UNITED STATES MAGISTRATE JUDGE