

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Hisense USA Corporation

Petitioner

v.

Brightplus Ventures LLC

Patent Owner

Case IPR2023-01385

U.S. Patent No. 7,690,812

PATENT OWNER'S OPENING CLAIM CONSTRUCTION BRIEF

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	LEGAL STANDARDS REGARDING CLAIM CONSTRUCTION	1
III.	BACKGROUND OF THE ‘812 PATENT	2
IV.	LEVEL OF SKILL IN THE ART	3
V.	PATENT OWNER’S PROPOSED CLAIM CONSTRUCTION IS CORRECT	4
	“CONFORM” — U.S. PATENT NO. 7,690,812 (CLAIMS 1, 15, 18, 21, 23).....	4
VI.	THE PRIOR ART DOES NOT DISCLOSE A REFLECTOR SHEET AS CLAIMED.....	7
VII.	CONCLUSION.....	9

Pursuant to the Board's October 2, 2024, Order (Paper 17), Patent Owner submits this opening brief regarding the correct construction of the claim term "conform" and, in support thereof, respectfully states as follows:

I. INTRODUCTION

Patent Owner's proposed construction of the claim term "conform" is correct and should be adopted by the Board. Patent Owner's construction is consistent with the claim language itself. Furthermore, it is consistent with the specification of the '812 Patent. It is also consistent with the file history of the application leading the '812 Patent. It is, therefore, the correct construction. On the other hand, Petitioner's proposed construction is overly narrow. It is also based on importing a limitation from the specification, which is a "cardinal sin" according to prevailing precedent.

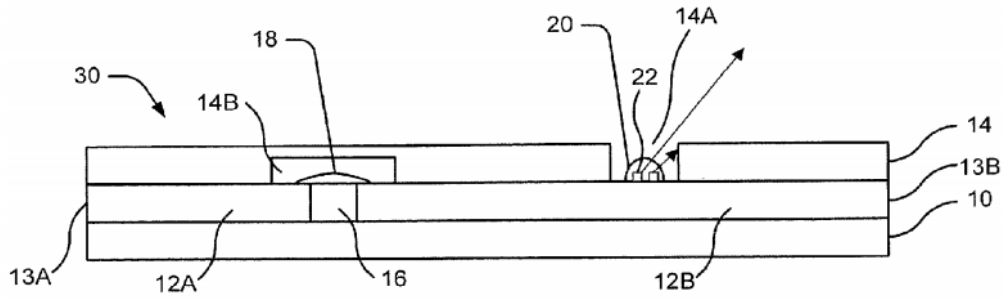
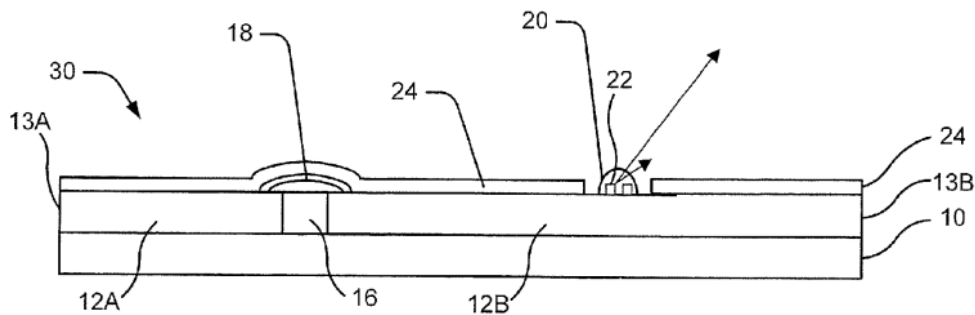
II. LEGAL STANDARDS REGARDING CLAIM CONSTRUCTION

When construing claims, the analysis begins with the words of the claim, which define the invention and its scope. Claim terms "are generally given their ordinary and customary meaning"—that is, "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-1313 (Fed. Cir. 2005). In ascertaining the ordinary and customary meaning of a patent claim term, various sources of information may be considered, which are traditionally categorized as either "intrinsic" or "extrinsic" evidence. *Id.*

Intrinsic evidence generally encompasses “the words of the claims themselves,” the specifications of the patent, and the patent's prosecution history. *Id.* The specifications section of a patent, which describes the specific embodiments of the invention in a “full” and “exact manner,” is “highly relevant to the claim construction analysis” and can be the “single best guide to the meaning of the disputed term.” *Id.* at 1311-12, 1315 (citing 35 U.S.C. § 112); accord *Vitronics Corp v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (“The specification contains a written description of the invention which must be clear and complete enough to enable those of ordinary skill in the art to make and use it. Thus, the specification is always highly relevant to the claim construction analysis.”). Additionally, the prosecution history of the patent, meaning the record of the proceedings before the Patent Office, is also helpful in the claim-construction analysis “evidence of how the PTO and the inventor understood the patent.” Phillips, 415 F.3d at 1317.

III. BACKGROUND OF THE ‘812 PATENT

The ‘812 Patent was published on April 6, 2010, and claims priority to U.S. Patent Application 11/687,160 filed on March 16, 2007. The ‘812 Patent discloses a solid state lighting tile that includes a substrate, solid state light elements mount of the substrate, and a reflector on a surface of the substrate. ‘812 Patent, Abstract.

**FIGURE 3****FIGURE 4**

Figures 3 and 4 of the '812 Patent, depicted above, show embodiments of reflector sheets of the invention. The '812 Patent states, "Additionally, the reflector sheet 24 includes a deformation characteristic that can provide conformance to surface protrusions such as an LWI 18." EX1001 at 6:33-36. The '812 Patent further discloses that "the reflector sheet of yet[sic] further embodiments can be configured to conform to a shape of a protruding feature on the tile." *Id.* at 1:57-59.

IV. LEVEL OF SKILL IN THE ART

On or before March 16, 2007, a POSITA relating to the technology of the '812 Patent would have: (a) a Bachelor's of Science degree in a technical field and at least four years of experience in the field of design and/or manufacture of display systems;

(b) a Master's of Science degree in a technical field and at least two years of experience in the field of design and/or manufacture of display systems; or (c) a PhD in a technical field relating to the design and/or manufacture of display systems. Additional graduate education could substitute for professional experience, or significant experience in the field could substitute for formal education. *Id.* at ¶¶ 31-34.

V. PATENT OWNER'S PROPOSED CLAIM CONSTRUCTION IS CORRECT

“conform” — U.S. Patent No. 7,690,812 (claims 1, 15, 18, 21, 23)

Patent Owner Brightplus' Proposed Construction 1:22-cv-02774	Petitioner Hisense's Construction 1:22-cv-02774
Plain and ordinary meaning. In the alternative, “provides cover and relief”	the reflector sheet overlays (e.g., by deformation), and has the same shape, outline, or contour of a protruding feature

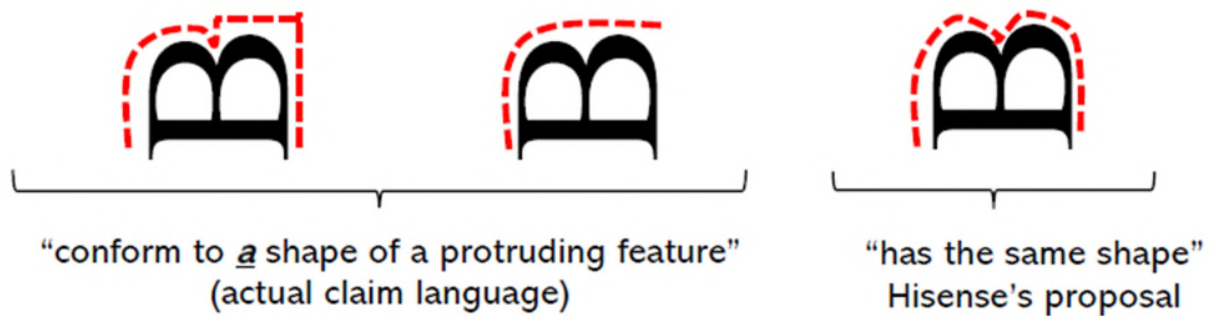
The term “conform” in both the challenged and proposed substitute claims should take on the same construction and meaning as proposed by Patent Owner. Namely, that “conform” should be given a plain and ordinary meaning, or, alternatively, it should be construed as “provides cover and relief”.

The specification provides two embodiments describing the meaning of the term “conform”. The first embodiment is illustrated in Fig. 3, wherein the “reflector sheet 14 may include recessed 14B configured to provide relief for surface protrusions, such as an LWI 18.” EX1001 at 5:9-11. The second embodiment is illustrated in Fig. 4, wherein the “reflector sheet 24 includes a deformation

characteristic that can provide conformance to surface protrusions such as an LWI 18.” *Id.* at 6:33-36. In alignment with the Board’s preliminary findings, the embodiments are alternative ways for a reflector sheet “to conform to a shape of a protruding feature.” Paper 7, 14.

Additionally, Patent Owner argues that it is improper to isolate the term “conform” from the rest of the Claim 1, primarily since the term conform precedes a significant limitation of the claim. Claim 1 states “configured to conform to *a* shape of a protruding feature.” As stated in the Patent Owner’s Response, “the claim does not recite ‘*the*’ shape as Petitioner’s construction requires. As the Federal Circuit has held, “[t]hat ‘a’ or ‘an’ can mean ‘one or more’ is best described as a rule, rather than merely as a presumption or even a convention.” *SanDisk Corp. v. Kingston Tech. Co.*, 695 F.3d 1348, 1360 (Fed. Cir. 2012). Since claim 1 expressly contemplates conformance to one of many possible shapes of a protruding feature, Petitioner’s construction is unduly narrow.” Paper 11 at 5. In other words, the claim permits a protruding feature to have multiple shapes, and conformance to only one is required. The difference can be seen in the following illustration with a dashed line showing conformance¹:

¹ This is the same argument that Patent Owner made in the parallel district court proceeding. (Case 1:22-cv-02774-TCB Document 56, pages 11-12).



Furthermore, during the prosecution of the application leading to the '812 Patent, the Applicant did not adopt the Examiner's definition of the word conform, i.e., "to give the same shape, outline, or contour to" Ex. 1002 at 153. Rather, Applicant stated that they "respectfully appreciate the definition of contour as provided in the Office Action and submit that such definition is not inconsistent with Applicants' previously submitted arguments" *Id.* This exchange supports Patent Owner's argument. Additionally, this particular discussion between the Applicant and Examiner was primarily concerned with the aperture of the prior art and whether it had the contour of the protruding feature. Applicant position is consistent with Patent Owner's in that a protruding feature would not be an aperture. In this discussion, Applicant did not make an argument to limit the term "conform" to either embodiment shown in Fig. 3 or 4, but argued that the reflector "conform[ing]" to a protruding feature is not an aperture that conforms to a hole.

Petitioner's construction of the term "conform" is improperly limiting. The term "conform", in light of the prosecution history and specification, does not

require the reflector to take on the exact shape of the protruding feature. Both embodiments shown in Fig. 3 and 4 are consistent with Patent Owner's proposed construction.

Further, the claim language explicitly requires that the reflector sheet must be "configured to conform to a shape of a protruding feature on the tile." The claim, therefore, demands specific configuration of the reflector sheet to accommodate the shape of a protruding feature as an essential feature of conforming.

VI. THE PRIOR ART DOES NOT DISCLOSE A REFLECTOR SHEET AS CLAIMED

Under Patent Owner's construction the reflector must provide cover and relief for a shape of a protruding feature on the tile. In the prior art, such as Chou, the reflector covers the lead and the solder, but it does not provide relief for the shape of the protruding feature. Chou explains angle θ of the reflector will change with the "amount" of solder, the "length" of the lead and the "height" of the spotlight source. None of these attributes describe the shape of the corresponding element and how the reflector provides relief for a particular shape of those elements. In Chou, the reflector will only cover the elements at a specified angle. This is not the same as providing relief. So, contrary to Petitioner's argument that Patent Owner contradicted its own construction (Paper 15 at 7-8), Patent Owner's construction is that the reflector essentially considers the shape of the protruding feature but is not required to take on that exact shape.

As described above and seen in Fig. 3 below (highlights added), the reflector sheet 700 only covers the lead, the solder and the spotlight source, and does not include a corresponding shape to conform to the lead 650 or spotlight source 600, or a circular shape that would conform to the solder 800. It simply a straight line that rests on the spotlight source 600.

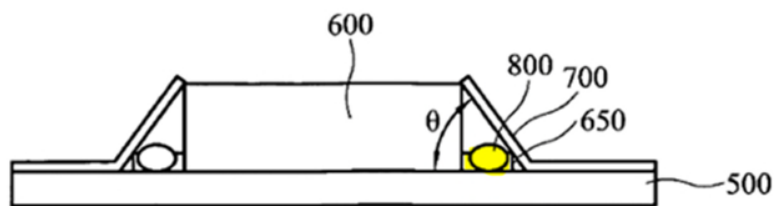


FIG. 3A

Additionally, with respect to Chou, Petitioner's expert offers no substantiative argument as to why a "deformable material" would "conform" to the solder, lead, or spotlight source in a way that is different than what is illustrate in Fig. 3A. Indeed, Petitioner's expert refers to Chou's description that the reflector sheet can be deformable, but the section cited states the following, "reflector sheet 1700 adjacent to hole 1750 is deformed to form an angle θ between about 0 degree to about 90 degree with the circuit board 1500" (Ex. 1005 at 4:29-35). Thus, the "deformable material" would still deform as depicted in Fig. 3A, and Petitioner nor its expert offer any additional evidence as to how or why Chou's deformable material would take the exact shape of any either elements 600, 650 or 800.

Also, none of the prior art discloses specific configuration of the reflector sheet to accommodate the shape of a protruding feature. Accordingly, the prior art is not invalidating.

VII. CONCLUSION

For the forgoing reasons, Patent Owner's proposed construction should be adopted.

Respectfully submitted,

/Neal Massand/
Neal Massand
Counsel for Petitioner

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that the above-captioned Mandatory Notice was served on counsel of record for the Petitioner by filing this document through the Patent Review Processing System as well as by delivering a copy via electronic mail to:

MFerrario@kilpatricktownsend.com (Lead Counsel)
MMorlock@kilpatricktownsend.com (Back-Up Counsel)

Dated: October 14, 2024

/s/ Neal Massand
Neal Massand (Reg. No. 54,296)