

HIGHLY CONFIDENTIAL –ATTORNEYS’ EYES ONLY

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

SINOTECHNIX LLC,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD.,
SAMSUNG ELECTRONICS AMERICA,
INC., AND SAMSUNG DISPLAY CO.,
LTD.

Defendants.

Civil Action No. 2:24-cv-544-JRG-RSP

JURY TRIAL DEMANDED

**DEFENDANTS’ AMENDED LOCAL PATENT RULE 3-3
INVALIDITY CONTENTIONS**

Defendants Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Display Co., Ltd., (collectively, “Samsung” or “Defendants”) hereby provide their Amended P.R. 3-3 Invalidity Contentions, including charts attached as Exhibits 162-1 through 162-14, 873-1 through 873-19, 113-1 through 113-13, 626-1 through 626-20, 952-1 through 952-17, and 913-1 through 913-16 and cited herein, to Plaintiff Sinotechnix LLC (“Sinotechnix” or “Plaintiff”), with respect to the asserted claims of U.S. Patent Nos. 7,618,162 (the “162 Patent”), 7,748,873 (the “873 Patent”), 7,901,113 (the “113 Patent”), 7,951,626 (the “626 Patent”), 8,132,952 (the “952 Patent”), and 9,412,913 (the “913 Patent”) (collectively, the “Asserted Patents”) identified in Plaintiff’s P.R. 3-1 Infringement Contentions, served on October 24, 2024, and Plaintiff’s P.R. 3-1 Amended Infringement Contentions, served on March 25, 2024 (collectively, the “P.R. 3-1 Infringement Contentions”).

In its P.R. 3-1 Infringement Contentions Sinotechnix has asserted the following claims (collectively, the “Asserted Claims”) against Samsung:

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A. '162 Patent

Subject to the reservation of rights set forth above and based on Samsung’s present understanding of the Asserted Claims of the Asserted Patents, and the apparent application of claim terms Plaintiff is asserting based on its Infringement Contentions, the Asserted Claims of the '162 Patent are anticipated by the following prior art references charted in Exhibits 162-1 to 162-13:

- U.S. Patent Publication No. 2005/0068786 (“Ishida”)
- Japanese Patent Application No. H07-27011 (“Mizuochi”)
- U.S. Patent Publication No. 2006/0034082 (“Park”)
- U.S. Patent No. 6,105,869 (“Scharf”)
- U.S. Patent No. 5,384,659 (“Shikama”)
- Japanese Patent Publication No. 2002/228921 (“Tamaoki I”)
- Japanese Patent Publication No. 2002/229120 (“Tamaoki II”)
- U.S. Patent No. 6,356,395 (“Tawa”)
- Japanese Patent Publication No. 2003/110146 (“Yamaguchi”)
- Samsung DLP TVs
- Lumileds Luxeon Lambertian Emitter
- U.S. Patent No. 4,852,980 (“Shinichi”)
- Osram TOPLED

For example, Exhibit 162-1 contains a claim chart demonstrating that Ishida disclosed, suggested, and/or rendered obvious each and every element of the Asserted Claims of the '162 Patent, at least under Plaintiff’s apparent application of its claims. Ishida is prior art to the '162 Patent. *See* Section III.A. As shown in Exhibit 162-1, at least under Plaintiff’s apparent application

of its claims, Ishida included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

For example, Exhibit 162-2 contains a claim chart demonstrating that Mizuochi disclosed, suggested, and/or rendered obvious each and every element of the Asserted Claims of the '162 Patent, at least under Plaintiff's apparent application of its claims. Mizuochi is prior art to the '162 Patent. *See* Section III.A. As shown in Exhibit 162-2, at least under Plaintiff's apparent application of its claims, Mizuochi included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

For example, Exhibit 162-3 contains a claim chart demonstrating that Park disclosed, suggested, and/or rendered obvious each and every element of the Asserted Claims of the '162 Patent, at least under Plaintiff's apparent application of its claims. Park is prior art to the '162 Patent. *See* Section III.A. As shown in Exhibit 162-3, at least under Plaintiff's apparent application of its claims, Park included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

For example, Exhibit 162-4 contains a claim chart demonstrating that Scharf disclosed, suggested, and/or rendered obvious each and every element of the Asserted Claims of the '162 Patent, at least under Plaintiff's apparent application of its claims. Scharf is prior art to the '162 Patent. *See* Section III.A. As shown in Exhibit 162-4, at least under Plaintiff's apparent application of its claims, Scharf included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

For example, Exhibit 162-5 contains a claim chart demonstrating that Shikama disclosed, suggested, and/or rendered obvious each and every element of the Asserted Claims of the '162 Patent, at least under Plaintiff's apparent application of its claims. Shikama is prior art to the '162

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Patent. *See* Section III.A. As shown in Exhibit 162-5, at least under Plaintiff's apparent application of its claims, Shikama included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

For example, Exhibit 162-6 contains a claim chart demonstrating that Tamaoki I disclosed, suggested, and/or rendered obvious each and every element of the Asserted Claims of the '162 Patent, at least under Plaintiff's apparent application of its claims. Tamaoki I is prior art to the '162 Patent. *See* Section III.A. As shown in Exhibit 162-6, at least under Plaintiff's apparent application of its claims, Tamaoki I included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

For example, Exhibit 162-7 contains a claim chart demonstrating that Tamaoki II disclosed, suggested, and/or rendered obvious each and every element of the Asserted Claims of the '162 Patent, at least under Plaintiff's apparent application of its claims. Tamaoki II is prior art to the '162 Patent. *See* Section III.A. As shown in Exhibit 162-7, at least under Plaintiff's apparent application of its claims, Tamaoki II included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

For example, Exhibit 162-8 contains a claim chart demonstrating that Tawa disclosed, suggested, and/or rendered obvious each and every element of the Asserted Claims of the '162 Patent, at least under Plaintiff's apparent application of its claims. Tawa is prior art to the '162 Patent. *See* Section III.A. As shown in Exhibit 162-8, at least under Plaintiff's apparent application of its claims, Tawa included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

For example, Exhibit 162-9 contains a claim chart demonstrating that Yamaguchi disclosed, suggested, and/or rendered obvious each and every element of the Asserted Claims of

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the '162 Patent, at least under Plaintiff's apparent application of its claims. Yamaguchi is prior art to the '162 Patent. *See* Section III.A. As shown in Exhibit 162-9, at least under Plaintiff's apparent application of its claims, Yamaguchi included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

For example, Exhibit 162-10 contains a claim chart demonstrating that Samsung DLP TVs included each and every element of the Asserted Claims of the '162 Patent, at least under Plaintiff's apparent application of its claims. Samsung DLP TVs were sold, offered for sale, and was known or used by others in this country before the priority date of the '162 Patent. *See* Section III.C.1. As shown in Exhibit 162-10, at least under Plaintiff's apparent application of its claims, Samsung DLP TVs included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

For example, Exhibit 162-11 contains a claim chart demonstrating that the Lumileds Luxeon Lambertian Emitter included each and every element of the Asserted Claims of the '162 Patent, at least under Plaintiff's apparent application of its claims. The Lumileds Luxeon Lambertian Emitter was sold, offered for sale, and was known or used by others in this country before the alleged priority date of the '162 Patent. *See* Section III.C.2. As shown in Exhibit 162-11, at least under Plaintiff's apparent application of its claims, the Lumileds Luxeon Lambertian Emitter included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

For example, Exhibit 162-12 contains a claim chart demonstrating that Shinichi disclosed, suggested, and/or rendered obvious each and every element of the Asserted Claims of the '162 Patent, at least under Plaintiff's apparent application of its claims. Shinichi is prior art to the '162 Patent. *See* Section III.A. As shown in Exhibit 162-9, at least under Plaintiff's apparent application

of its claims, Shinichi included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

For example, Exhibit 162-13 contains a claim chart demonstrating that the Osram TOPLED included each and every element of the Asserted Claims of the '162 Patent, at least under Plaintiff's apparent application of its claims. The Osram TOPLED was sold, offered for sale, and was known or used by others in this country before the alleged priority date of the '162 Patent. See Section III.C.22. As shown in Exhibit 162-13, at least under Plaintiff's apparent application of its claims, the Osram TOPLED included all claimed features of the '162 Patent, at least under Plaintiff's apparent application of its claims.

B. '873 Patent

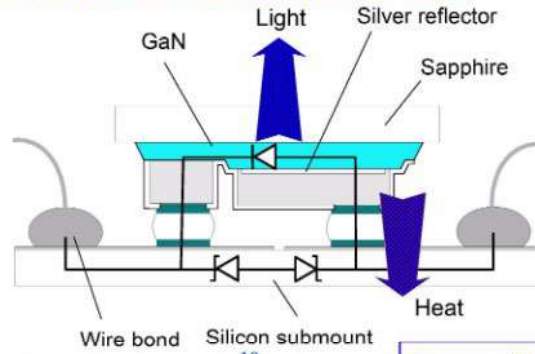
As detailed in Section II.A above, the Asserted Claims of the '873 Patent are not supported by the Korean Prior Applications and, therefore, are not entitled to a priority date before September 8, 2005. At least under the proper priority date, and subject to the reservation of rights set forth above and based on Samsung's present understanding of the Asserted Claims of the Asserted Patents, and the apparent application of claim terms Plaintiff is asserting based on its Infringement Contentions, the Asserted Claims of the '873 Patent are anticipated by the following prior art references charted in Exhibits 873-1 to 873-18:

- Japanese Patent Application No. 2002-344027 ("Odawara")
- U.S. Patent No. 6,674,096 ("Sommers")
- U.S. Patent No. 6,598,998 ("West I")
- Japanese Patent No. 2,593,554 ("Koike")
- Japanese Patent Application No. H09-18058 ("Koizumi")
- Japanese Patent Publication No. 2000-133822 ("Kunii")

Better use of generated photons

Light extraction efficiency is improved in flip chip designs by;

- No attenuation of light by semi-transparent metal electrodes,
- Absorption of wave-guided light is dramatically reduced through the use of highly reflective metallization schemes,
- No light is obscured by bond pads or wires.



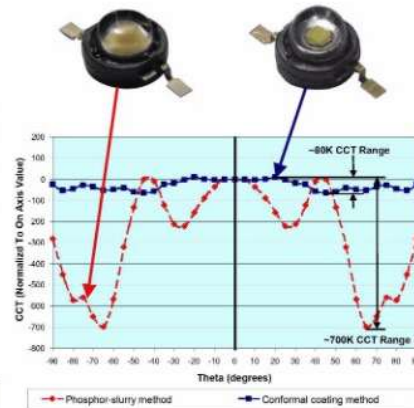
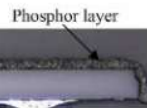
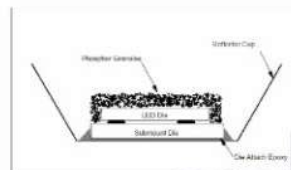
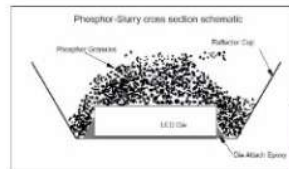
SAE 2004

10

Paper #2004-01-0255

SAMSUNG-SINO_0213207

Conformal phosphor coating



SAE 2004

15

Paper #2004-01-0255

SAMSUNG-SINO_0213212

C. '162 Patent

Prior art references rendering the Asserted Claims of the '162 Patent obvious, alone or in combination with other references, are identified and discussed below and are included in the claim

charts Exhibits 162-1 through 162-11. Exhibits 162-1 through 162-11 include exemplary claim charts for the '162 Patent showing specific combinations of references, including citations to where in the references the teachings, suggestions, and motivations to combine the references are disclosed. Further reasons to combine the references identified in Exhibits 162-1 through 162-11 include the nature of the problem being solved, the express, implied and inherent teachings of the prior art, the knowledge of persons of ordinary skill in the art, that such combinations would have yielded predictable results, and that such combinations would have represented known alternatives to a person of ordinary skill in the art.

The primary references cited in Defendants’ exemplary claim charts, Exhibits 162-1 through 162-11 are Ishida, Mizuochi, Park I, Scharf, Shikama, Tamaoki I, Tamaoki II, Tawa, Yamaguchi, Samsung DLP TVs, and Luxeon Lambertian. Each of the primary references discloses and/or suggests all or, at a minimum, the vast majority of the limitations of the Asserted Claims of the '162 Patent. To the extent any claim elements are found to be missing from a particular primary reference, the claim element would have been rendered obvious by the particular primary reference in combination with other primary references and/or with secondary references identified and described in Sections V.B.1 (Concave Surface), V.B.2 (Uniform Irradiance), V.B.3 (Output Beam), V.B.4 (Compact Light Source), V.B.5 (Target Plane), V.B.6 (Target Plane), V.B.7 (LED Top Emitter), V.B.8 (Multiple Lens).

Specifically, subject to the reservation of rights above and based at least on Samsung’s present understanding of the Asserted Claims of the '162 Patent and Sinotechnix’s apparent application of its Asserted Claims, the following Asserted Claims of the '162 Patent are rendered obvious by the specified combinations of references. These specified combinations of references are meant to be illustrative only and are not meant to be limited to only the exemplary combinations

explicitly noted below. For example, each of the primary reference can be combined with any one of the specific secondary references identified in Sections V.B.1 through V.B.8.

To the extent a finder of fact finds that a limitation of a given claim was not disclosed by one of the references identified above, those claims are nevertheless unpatentable as obvious because the asserted claims contain nothing that goes beyond ordinary creativity. To the extent not anticipated, no asserted claim goes beyond combining known elements to achieve predictable results or does more than choose between clear alternatives known to those of ordinary skill in the art, particularly in view of the state of the art as reflected in the relevant references listed above in Sections V.B.1 (Concave Surface), V.B.2 (Uniform Irradiance), V.B.3 (Output Beam), V.B.4 (Compact Light Source), V.B.5 (Target Plane), V.B.6 (Target Plane), V.B.7 (LED Top Emitter), V.B.8 (Multiple Lens).

1. Reasons For Modifications And/Or Combinations

Applying the principles of obviousness described in Section V.A, it would have been obvious to a person of ordinary skill in the art at the time the application that issued as the '162 Patent was filed to combine, modify, or use the teachings of the prior art to make the purported inventions of those patents, including by making each of the combinations identified above. The motivation to combine the teachings of the prior art references disclosed herein can be found in each of (1) the references themselves, (2) the nature of the problem being solved, (3) the express, implied and inherent teachings of the prior art, (4) the knowledge of persons of ordinary skill in the art, (5) the fact that the prior art is generally directed towards the subject matter of each respective asserted patent, and (6) the predictable results obtained in combining the elements of the prior art.

Any reference or combination of references that anticipates or makes obvious an asserted independent claim also makes obvious any asserted claim dependent on that independent claim

(citation omitted). “The scope of the claims must be less than or equal to the scope of the enablement.” *Nat’l Recovery Techs., Inc. v. Magnetic Separation Sys., Inc.*, 166 F.3d 1190, 1196 (Fed. Cir. 1999).

At least the Asserted Claims referenced below are invalid because the specifications fail to provide an enabling disclosure of at least the following limitations:

1. ’162 Patent

- “said entry surface spatially distributed such that said exit surface receives said deflected light with predominantly uniform irradiance” (’162 Patent Claim 1).
- “said entry surface having first concavity facing toward said light source, and second concavity facing toward the entry surface” (’162 Patent Claims 1, 39).
- “said second concavity being substantially greater than said first concavity,” (’162 Patent Claims 1, 39).
- “said LED means and said upper and lower surfaces configured to produce a profile of bounded flux at said target surface that provides substantially uniform illuminance,” (’162 Patent Claims 31, 43).
- “said entry-surface deflection spatially distributed such that said exit surface receives said deflected light with predominantly uniform irradiance,” (’162 Patent Claim 39).

2. ’873 Patent

- “a total reflection surface with a total reflection slope with respect to a central axis of the body” (’873 Patent Claims 1, 8).

3. ’113 Patent

- “a total reflection surface with a total reflection slope with respect to a central axis of the body” (’113 Patent Claim 1).

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EXHIBIT 162-10

Invalidity Claim Chart for U.S. Patent No. 7,618,162

Samsung DLP Televisions including models HLM507WXXAA, HLN617WXXAA, HLP5067WXXAA, HLP5063WXXAA, HLN5065W1XXAA (“Samsung DLP TVs”), which were on sale to the U.S. public as early as June 6, 2002, is prior art to U.S. Patent No. 7,618,162 (the “’162 Patent”). As explained in Section II.B of Defendants’ Patent L.R. 3-3 Invalidity Contentions (the “Invalidity Contentions”), the proper priority date of the ’162 Patent is November 12, 2004, rendering Samsung DLP TVs prior art pursuant to at least pre-AIA 35 U.S.C. §§ 102(a), (b), and (e). Samsung DLP TVs anticipates and/or renders obvious the asserted claims of the ’162 Patent under pre-AIA and/or AIA 35 U.S.C. §§ 102 and/or 103.

As set forth in the chart below, all the ’162 Patent’s asserted claims are anticipated by and/or rendered obvious over Samsung DLP TVs under at least the apparent claim constructions advanced by Plaintiff based on its Patent L.R. 3-1 Infringement Contentions (the “Infringement Contentions”).¹

The citations to portions of any reference in this chart are exemplary only. Defendants reserve the right to use the entirety of any reference described in Section III of the Invalidity Contentions to show that the asserted claims are anticipated and/or obvious.

The structure, function, technical operation, and manufacture of Samsung DLP TVs prior to the ’162 Patent’s proper priority date is evidenced by at least:

- BP67-00075A Specification (“DLP Engine Optical Components”).
- BN67-00061A Specification (“Illumination System Lens”).
- BP67-00093A Specification (“Projection Assembly Specification”).
- Engineering Specification for 43", 46", 50", 56", 61" DLP Projection TV (“DLP TV Specification”).

The structure, function, technical operation, and manufacture of Samsung DLP TVs prior to the ’162 Patent’s proper priority date is further expected to be evidenced by at least:

- Documents and testimony from Defendants or their affiliates.
- The knowledge of persons familiar with Samsung DLP TVs, including without limitation their inventors.

¹ The excerpts cited herein are exemplary; for any claim limitation, Defendants may rely on excerpts cited for any other limitation and/or additional excerpts not set forth fully herein to the extent necessary to comprehensively explain a reference’s disclosed limitation. Where an excerpt refers to or discusses a figure or figure items, that figure and any additional figure descriptions are incorporated by reference as if set forth fully therein.

Defendants expressly reserve the right to supplement these contentions by adding additional information showing that Samsung DLP TVs invalidate the ’162 Patent’s asserted claims.

To the extent that any of the below claim limitations are found to not be expressly disclosed by the below reference, Defendants contends that any such limitation would have been obvious, either based on the knowledge of a person of ordinary skill in the art (“POSITA”) or based on any of the art cited in Defendants’ Invalidity Contentions Exhibits 162-1 through 162-14, which are incorporated herein by reference. As evidenced by the below and in Defendants’ Invalidity Contentions Section V.B, the ’162 Patent is merely a collection of prior art elements that fails to meet the statutory requirement of nonobviousness under § 103, and the factors delineated in *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007), weigh against a finding of nonobviousness.

For example, it would have been obvious to a POSITA to combine the teaching of Samsung DLP TVs with the teachings of the references charted in Defendants’ Invalidity Contentions Exhibits 162-1 through 162-14; such references are in the same field of art, and discuss various techniques and improvements that would have been known to yield predictable results when applied to the technology claimed in the ’162 Patent, and a POSITA therefore would have been motivated to so combine them in view of the disclosures therein.

It is also Defendants’ contention that a POSITA would find such limitations obvious for numerous reasons, including (1) the combination would unite old elements with no change in their respective function, (2) the combination would have been a predictable variation of a work in the same or a different field of endeavor, (3) the modification would have used a known technique to improve a similar device in the same way, (4) the modification was a known problem for which there was an obvious solution, (5) the modification would have been “obvious to try,” (6) the modification was known work in one field of endeavor that would have prompted variations of it for use in either the same or different field based on design incentives or other market forces, or (7) there was an explicit teaching, suggestion, or motivation in the prior art for the modification.

Defendants are still investigating this prior art, and third-party discovery may yield pertinent information. Defendants reserve the right to modify, amend, and supplement these contentions as information becomes available (e.g., witness testimony and non-public documentation) and as discovery proceeds.

Except where specifically noted otherwise, this chart applies the apparent claim term constructions as used in Sung’s Infringement Contentions; such use, however, does not imply that Defendants adopt or agree with Sinotechnix’s constructions in any way.

EXHIBIT 162-11

Invalidity Claim Chart for U.S. Patent No. 7,618,162

The Lumileds Luxeon® III Side-Emitter (“Luxeon Lambertian”), which was on sale to the U.S. public at least as early as May 28, 2004, is prior art to U.S. Patent No. 7,618,162 (the “’162 Patent”). As explained in Section II.B of Defendants’ Patent L.R. 3-3 Invalidity Contentions (the “Invalidity Contentions”), the proper priority date of the ’162 Patent is November 12, 2004, rendering the Luxeon Lambertian prior art pursuant to at least pre-AIA 35 U.S.C. §§ 102(a), (b), and (e). The Luxeon Lambertian anticipates and/or renders obvious the asserted claims of the ’162 Patent under pre-AIA and/or AIA 35 U.S.C. §§ 102 and/or 103.

As set forth in the chart below, all the ’162 Patent’s asserted claims are anticipated by and/or rendered obvious over the Luxeon Lambertian under at least the apparent claim constructions advanced by Plaintiff based on its Patent L.R. 3-1 Infringement Contentions (the “Infringement Contentions”).¹

The citations to portions of any reference in this chart are exemplary only. Defendants reserve the right to use the entirety of any reference described in Section III of the Invalidity Contentions to show that the asserted claims are anticipated and/or obvious.

The structure, function, technical operation, and manufacture of the Luxeon Lambertian prior to the ’162 Patent’s proper priority date is evidenced by at least:

- Luxeon® III Emitter Technical Datasheet DS45 (“Luxeon Datasheet”).
- Lumileds™ “LED Backlighting from Revolution to Reality” Presentation at The 6th Annual DisplaySearch US FPD Conference (“Pugh”).
- Lumileds™ “LED Backlighting: Disruptive Technology made Easy” Presentation (“Lumileds”).
- Lumileds™ “From Concept to Reality to the Future” Presentation at IESNA 2004 (“Scott”).
- Lumileds™ “LED Backlight designs using Luxeon high flux Light source solutions” Presentation at SID 2004 (“Folkerts”).
- Lumileds™ “White Lighting (Illumination) with LEDs” Presentation at First International Conference on Nitride Semiconductors (ICNS), 2003 (“Goetz”).
- Lumileds™ “Light-emitting diodes in automotive forward lighting applications: materials engineering solutions to fundamental challenges” Presentation at SAE 2004 (“Kern”).

The structure, function, technical operation, and manufacture of the Luxeon Lambertian prior to the ’162 Patent’s proper priority date is further expected to be evidenced by at least:

- Documents and testimony from Lumileds, LLC or its affiliates.

¹ The excerpts cited herein are exemplary; for any claim limitation, Defendants may rely on excerpts cited for any other limitation and/or additional excerpts not set forth fully herein to the extent necessary to comprehensively explain a reference’s disclosed limitation. Where an excerpt refers to or discusses a figure or figure items, that figure and any additional figure descriptions are incorporated by reference as if set forth fully therein.

- The knowledge of persons familiar with Luxeon, including without limitation its inventors.

Defendants expressly reserve the right to supplement these contentions by adding additional information showing that the Luxeon Lambertian invalidates the '162 Patent's asserted claims.

To the extent that any of the below claim limitations are found to not be expressly disclosed by the below reference, Defendants contends that any such limitation would have been obvious, either based on the knowledge of a person of ordinary skill in the art ("POSITA") or based on any of the art cited in Defendants' Invalidity Contentions Exhibits 162-1 through 162-14, which are incorporated herein by reference. As evidenced by the below and in Defendants' Invalidity Contentions Section V.B, the '162 Patent is merely a collection of prior art elements that fails to meet the statutory requirement of nonobviousness under § 103, and the factors delineated in *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007), weigh against a finding of nonobviousness.

For example, it would have been obvious to a POSITA to combine the teaching of the Luxeon Lambertian with the teachings of the references charted in Defendants' Invalidity Contentions Exhibits 162-1 through 162-14; such references are in the same field of art, and discuss various techniques and improvements that would have been known to yield predictable results when applied to the technology claimed in the '162 Patent, and a POSITA therefore would have been motivated to so combine them in view of the disclosures therein.

It is also Defendants' contention that a POSITA would find such limitations obvious for numerous reasons, including (1) the combination would unite old elements with no change in their respective function, (2) the combination would have been a predictable variation of a work in the same or a different field of endeavor, (3) the modification would have used a known technique to improve a similar device in the same way, (4) the modification was a known problem for which there was an obvious solution, (5) the modification would have been "obvious to try," (6) the modification was known work in one field of endeavor that would have prompted variations of it for use in either the same or different field based on design incentives or other market forces, or (7) there was an explicit teaching, suggestion, or motivation in the prior art for the modification.

Defendants are still investigating this prior art, and third-party discovery may yield pertinent information. Defendants reserve the right to modify, amend, and supplement these contentions as information becomes available (e.g., witness testimony and non-public documentation) and as discovery proceeds.

Except where specifically noted otherwise, this chart applies the apparent claim term constructions as used in Sung's Infringement Contentions; such use, however, does not imply that Defendants adopt or agree with Sinotechnix's constructions in any way.

EXHIBIT 162-13

Invalidity Claim Chart for U.S. Patent No. 7,618,162

The OSRAM TOPLED with Lens (“TOPLED”), which was on sale to the U.S. public at least as early as January 5, 2003, is prior art to U.S. Patent No. 7,618,162 (the “’162 Patent”). As explained in Section II.B of Defendants’ Patent L.R. 3-3 Invalidity Contentions (the “Invalidity Contentions”), the proper priority date of the ’162 Patent is November 12, 2004, rendering the TOPLED prior art pursuant to at least pre-AIA 35 U.S.C. §§ 102(a) and (b). the TOPLED anticipates and/or renders obvious the asserted claims of the ’162 Patent under pre-AIA and/or AIA 35 U.S.C. §§ 102 and/or 103.

As set forth in the chart below, all the ’162 Patent’s asserted claims are anticipated by and/or rendered obvious over the TOPLED under at least the apparent claim constructions advanced by Plaintiff based on its Patent L.R. 3-1 Infringement Contentions (the “Infringement Contentions”).¹

The citations to portions of any reference in this chart are exemplary only. Defendants reserve the right to use the entirety of any reference described in Section III of the Invalidity Contentions to show that the asserted claims are anticipated and/or obvious.

The structure, function, technical operation, and manufacture of the TOPLED prior to the ’162 Patent’s proper priority date is evidenced by at least:

- Power TOPLED® with Lens Catalog Listing (“TOPLED Catalog”)
- LA E63B Product Catalog Listing (“E63B 1”)
- LA E63B Product Catalog Listing 2 (“E63B 2”)
- LA E63B Datasheet
- LA E65B Product Catalog Listing (“E65B 1”)
- LA E65B Product Catalog Listing 2 (“E65B 2”)
- LA E65B Datasheet
- U.S. Patent No. 6,759,803 to Sorg (“Sorg”)

The structure, function, technical operation, and manufacture of the TOPLED prior to the ’162 Patent’s proper priority date is further expected to be evidenced by at least:

- Documents and testimony from Osram Sylvania Inc. or its affiliates.
- The knowledge of persons familiar with the TOPLED, including without limitation its inventors.

¹ The excerpts cited herein are exemplary; for any claim limitation, Defendants may rely on excerpts cited for any other limitation and/or additional excerpts not set forth fully herein to the extent necessary to comprehensively explain a reference’s disclosed limitation. Where an excerpt refers to or discusses a figure or figure items, that figure and any additional figure descriptions are incorporated by reference as if set forth fully therein.

Defendants expressly reserve the right to supplement these contentions by adding additional information showing that the TOPLED invalidates the '162 Patent's asserted claims.

To the extent that any of the below claim limitations are found to not be expressly disclosed by the below reference, Defendants contends that any such limitation would have been obvious, either based on the knowledge of a person of ordinary skill in the art ("POSITA") or based on any of the art cited in Defendants' Invalidity Contentions Exhibits 162-1 through 162-14, which are incorporated herein by reference. As evidenced by the below and in Defendants' Invalidity Contentions Section V.B, the '162 Patent is merely a collection of prior art elements that fails to meet the statutory requirement of nonobviousness under § 103, and the factors delineated in *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007), weigh against a finding of nonobviousness.

For example, it would have been obvious to a POSITA to combine the teaching of the TOPLED with the teachings of the references charted in Defendants' Invalidity Contentions Exhibits 162-1 through 162-14; such references are in the same field of art, and discuss various techniques and improvements that would have been known to yield predictable results when applied to the technology claimed in the '162 Patent, and a POSITA therefore would have been motivated to so combine them in view of the disclosures therein.

It is also Defendants' contention that a POSITA would find such limitations obvious for numerous reasons, including (1) the combination would unite old elements with no change in their respective function, (2) the combination would have been a predictable variation of a work in the same or a different field of endeavor, (3) the modification would have used a known technique to improve a similar device in the same way, (4) the modification was a known problem for which there was an obvious solution, (5) the modification would have been "obvious to try," (6) the modification was known work in one field of endeavor that would have prompted variations of it for use in either the same or different field based on design incentives or other market forces, or (7) there was an explicit teaching, suggestion, or motivation in the prior art for the modification.

Defendants are still investigating this prior art, and third-party discovery may yield pertinent information. Defendants reserve the right to modify, amend, and supplement these contentions as information becomes available (e.g., witness testimony and non-public documentation) and as discovery proceeds.

Except where specifically noted otherwise, this chart applies the apparent claim term constructions as used in Sung's Infringement Contentions; such use, however, does not imply that Defendants adopt or agree with Sinotechnix's constructions in any way.

EXHIBIT 162-14

Invalidity Claim Chart for U.S. Patent No. 7,618,162

The prior art references discussed in the following chart are prior art to U.S. Patent No. 7,618,162 (the “’162 Patent”) pursuant to at least pre-AIA 35 U.S.C. §§ 102(a), 102(b), and 102(e) under the ’162 Patent’s proper priority date. The prior art references anticipate and/or render obvious the asserted claims of the ’162 Patent under pre-AIA 35 U.S.C. §§ 102 and/or 103.

As set forth in the charts below, all the ’162 Patent’s asserted claims are anticipated and/or obvious over the prior art references under at least Plaintiff’s apparent claim constructions based on its Patent L.R. 3-1 Infringement Contentions (the “Infringement Contentions”).¹

The citations to portions of any reference in this chart are exemplary only. Defendants reserve the right to use the entirety of any reference described in Section IV of Defendants’ Patent L.R. 3-3 Invalidity Contentions (the “Invalidity Contentions”) to show that the asserted claims are anticipated and/or obvious.²

A person of ordinary skill in the art (a “POSITA”), as of the ’162 Patent’s proper priority date, would have known to combine the prior art elements disclosed by the references below and/or the references cited in Exhibits 162-1 through 162-13 of the Invalidity Contentions using known methods, and to use these elements according to their established functions to achieve a known and predictable result. Because these prior art references are within a common field of endeavor, and/or are directed to a related set of problems, it would have been obvious for a POSITA to look from one of the identified references to another to find any missing functionality. A POSITA would have been motivated to do so for the reasons identified by the references below, because there were only a finite number of predictable solutions, because known work in a common field of endeavor often prompts variations based on predictable design incentives, and/or because of market forces in the same or a related field. Moreover, a POSITA would have found the combination obvious to try, due at least to the similarity and interrelatedness of the technical teachings of the art. As another example, a POSITA would have found that the teachings may have been predictably interchanged by, for example, simple substitution of parts, at least because of the predictability of the art and the known interchangeability of the various elements or process steps. In addition, combining the references identified below would have been obvious because the combinations represent known potential options with a reasonable expectation of success. Further, a POSITA would have been motivated to combine any of the references below and/or the references cited in Exhibits 162-1 through 162-13 with one or more of the references below for the reasons set forth in Section V.C of the Invalidity Contentions. A POSITA would have had a reasonable expectation

¹ The excerpts cited herein are exemplary. For any claim limitation, Defendants may rely on excerpts cited for any other limitation and/or additional excerpts not set forth fully herein to the extent necessary to provide a more comprehensive explanation for a reference’s disclosure of a limitation. Where an excerpt refers to or discusses a figure or figure items, that figure and any additional descriptions of that figure should be understood to be incorporated by reference as if set forth fully therein.

² The prior art references discussed herein are cited by the abbreviations identified in the cover pleading. See Invalidity Contentions Sec. IV.A.

of success in combining any of the references below and/or the references cited Exhibits 162-1 through 162-13 with one or more of those references for the reasons set forth in Section V.C of the Invalidity Contentions.

Defendants are investigating this prior art and have not yet completed discovery from third parties who may have information concerning it. Defendants reserve the right to modify, amend, and/or supplement these contentions as information becomes available (e.g., witness testimony and/or non-public documentation) and as discovery proceeds.

Except where specifically noted otherwise, this chart applies the apparent constructions of claim terms as used by Plaintiff in its Infringement Contentions; such use, however, does not imply that Defendants adopt or agree with Plaintiff’s constructions in any way.

Claim	Claim Language	Prior Art Disclosure
1(pre)	An irradiance-redistribution illumination lens comprising	Under at least the apparent constructions in Plaintiff’s Infringement Contentions, and to the extent that the preamble is limiting, Tawa discloses, suggests, and/or renders obvious an irradiance-redistribution illumination lens. For example, Tawa discloses and/or suggests light intensity distribution converting device. <i>See, e.g.,</i> Tawa at Title (“Light intensity distribution converting device and optical data storage apparatus”). <i>See, e.g.,</i> Tawa at Abstract (“A light intensity distribution converting device is formed by a transparent body having a first curved surface, a second curved surface, and an outer circumferential surface extending between the first and second curved surfaces. One of first and second surfaces has a concave surface configuration and the other has a convex surface configuration. Diverging light is made incident to the first curved surface, for example. The light intensity distribution of light made incident to the body from first curved surface is different from that of light emerging the body from the second curved surface, due to refractions at the first and second curved surfaces. The light intensity distribution converting device can be used as a collimator lens or an objective lens in an optical data storing apparatus.”). <i>See, e.g.,</i> Tawa at Claim 8 (“An optical device comprising: a light source, and a light intensity distribution converting device which is used for at least one of incident light and emerging light being diverging light or converging light, said device comprising: a body including a first curved surface extending transversely of a central axis, a second curved surface extending transversely of the central axis, and an outer circumferential surface extending between said first curved surface and said second