IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

RETROLED COMPONENTS, LLC, Plaintiff,	§	Civil Case No. 6:18-cv-55-ADA
v.	§	JURY TRIAL DEMANDED
PRINCIPAL LIGHTING GROUP, LLC Defendant.	§	EXHIBIT TO RETROLED COMPONENTS, LLC'S INITIAL DISCLOSURES OF INVALIDITY

Exhibit *Royal Lighting* in view of *Huang* and further in view of the *Socarras References*

35 U.S.C. § 103 - Claim 2

US 9311835	**Patent US 9,311,835 Claim Chart – *Breihof* '835**	**Exhibit *Royal Lighting* in view of *Huang* and further in view of the *Socarras References*** **35 U.S.C. §103 – Claim 2**		
Assignee:	SignComp, LLC			
Title:	Lighting mount for interior-lighted signage and method of retrofitting a lighted sign	***Royal Lighting*** **Japanese Publication No. 2010-123097** **Applicant: Royal Lighting Co. Ltd** **Priority Date: 11/17/2008** **Published: 6/3/2010**	***Huang*** **US Pub. No. 2009/0027916 A1** **Priority Date: 12/14/2005** **Filed: 7/22/2008** **Published: 1/29/2009**	***Socarras References*** **U.S. Provisional No.: 61/332,080** **Filed (Priority Date): 4/8/2010** **US Pub. No. 2011/0249440 A1** **Filed: 4/7/2011** **US Patent No. 8,926,129** **Issued: 1/6/2015**
Filing Date:	2011-11-22			
Publication Date:	2016-04-12			
Inventor:	Breihof, Thomas C.			
Earliest Priority:	2010-11-24, US 61417156			

Claims:

1	Claim 1	See Narrative Contention D and its Exhibits.
2	The lamp support assembly of claim 1, wherein said elongate support member comprises an I-beam cross section having a web portion and spaced-apart flange portions on opposite ends of said web portion.	Dependent claim 2 of the *Breihof* '835 patent is invalid as being obvious under 35 U.S.C. § 103 over *Royal Lighting* in view of *Huang* and further in view of the *Socarras References*. Claim 2 is dependent on independent claim 1. Narrative Contention D and any associated Exhibits shows that claim 1 is obvious over *Royal*

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		Lighting in view of *Huang*. Claim 2 adds to claim 1 the limitation "*wherein said elongate support member comprises an I-beam cross-section having a web portion and spaced apart flange portions on opposite ends of said web portion*." (*Breihof* '835 claim 2). Each of the *Socarras References* discloses a system in which an elongate support member (identified as a divider in the *Socarras References*) supports plural LEDs in a lighting system devised to be a replacement for fluorescent bulbs. Having an I-beam cross section for LEDs as used in a lamp assembly devised to replace fluorescent bulbs. "*The present invention relates generally to lighting systems and more specifically to various embodiments of a light-emitting diode (hereinafter referred to as "LED") lighting system including a lamp, end caps, and power supply. The present invention comprises an improved LED lighting system designed to be used in connection with a wide variety of applications, including custom signs and to retrofit existing signs. The present invention offers high efficiency, low heat-emission lighting that is 100% recyclable,*

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		features that are not possible with common high output fluorescent light systems." (Col. 1, ll. 26-36 of *Socarras Patent*). The Socarras Provisional is similar. "*The present invention relates generally to lighting systems and more specifically to a light emitting diode (hereafter referred to as "LED" lighting system including a light bulb arrangement, end caps, and power supply.*" [0003] *Socarras Provisional*. As to the I-beam cross-section of the "elongate support member" in particular as recited in claim 2 of *Breihof* '835, "*[a]s shown in figure 2, in some embodiments of the present invention, divider 3 may be made of translucent acrylic and have an 'I-beam' shaped cross-section wherein the thickness of divider 3 is slightly narrower at the center of the cross-section. The I-beam shaped cross section delimits a channel 13 along the length of divider 3 such that it is adapted to receive light strips 5 thereto.*" (*Provisional Socarras*, [0020]) In the *Socarras Patent* it is stated that, "*[a]s shown in FIG. 2, in some embodiments of the present invention, divider 3 may be made of translucent acrylic and may have an "I-beam*" shaped cross-section

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		wherein the thickness of divider 3 is slightly narrowed at the center of the cross-section. The "I-beam" shaped cross-section delimits channels 13 and 13' along the length of divider 3 such that it is adapted to receive light strips 5 on either side thereof." (Col. 3, ll. 31-37 of *Socarras Patent*.) Further, the divider "*may include one or more fins longitudinally disposed along a length thereof.*" (*Socarras Patent*, Col. 1, ll. 58-60.) In describing how the LED strip 5 may be secured to the channel of the I-beam configured elongate support member, the *Socarras Provisional* states, "*In some embodiments, strip 5 may be secured to channel 13 (and therefore divider 3) by compression fit or by an adhesive material. If a compression fit is used, it may be preferable that the cross section of the divider at channel 13 is notched or lipped such that the sides of channel 13 are capable of receiving the edges of ribbon 9 thus securing the ribbon to the channel. The use of this type of lipped channel allows for strip 5 to be interchanged, replaced, and/or repaired as desired without damaging divider 3*." (*Socarras Provisional*, [0021]) Claim 5 of filed *Provisional*

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		Socarras recites, "*5. The lighting system of claim 1, wherein said cross-section is I-beam shaped such that a channel is formed along each of said first side and second side of said divider.*" The *Socarras References* are directed to fluorescent to LED replacements and systems and, therefore, a POSA at the time of the invention would have been motivated to combine various elements and structures from the *Socarras References* including the recited disclosed *Socarras* I-beam configuration for the elongate support member with those of *Royal Lighting* and *Huang* thus, rendering as a whole, the claimed invention of claim 2 of the *Breihof* '835 patent obvious to a person of ordinary skill in the art at the time. See Exhibit *InfoSystems* in view of *Huang* and/or *Withers* and/or *Royal Lighting* in view of *Socarras References.* **Col. 1, ll. 19-22, *Socarras Patent:*** … the present invention provides an LED lighting system that is a direct replacement for high-output fluorescent lighting

		systems known in the art while maintaining the same high-output light emission characteristics of such systems. **¶ 23, ll 8-10 *Socarras Provisional***: In one embodiment, the two end caps are adapted to couple to existing fluorescent light sockets (as shown) for adaptability and compatibility with common lighting systems. **Col. 1, ll. 26-35, *Socarras Patent:*** The present invention relates generally to lighting systems and more specifically to various embodiments of a light-emitting diode (hereinafter referred to as "LED") lighting system including a lamp, end caps, and power supply. The present invention comprises an improved LED lighting system designed to be used in connection with a wide variety of applications, including custom signs and to retrofit existing signs. The present invention offers high efficiency, low heat-emission lighting that is 100% recyclable, features that are not possible with common high output fluorescent light systems.

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		¶ 20 ***Socarras Provisional***: As shown in figure 2, in some embodiments of the present invention, divider 3 maybe be made of translucent acrylic and may have an "I-beam" shaped cross-section wherein the thickness of divider 3 is slightly narrowed at the center of the cross-section. The "I-beam" shaped cross-section delimits a channel 13 along the length of divider 3 such that it is adapted to receive light strip 5 thereto. **Col. 3, ll. 31-37*, Socarras Patent:*** As shown in FIG. 2, in some embodiments of the present invention, divider 3 may be made of translucent acrylic and may have an "I-beam" shaped cross-section wherein the thickness of divider 3 is slightly narrowed at the center of the cross-section. The "I-beam" shaped cross-section delimits channels 13 and 13' along the length of divider 3 such that it is adapted to receive light strips 5 on either side thereof. **Col. 6, ll. 4-15, *Socarras Patent:*** In some embodiments, the two end caps are adapted to couple to existing standard fluorescent light sockets for adaptability and

		compatibility with common lighting systems. The size and shape of the end caps shown in the figures should not be construed as limiting as the geometry of the end caps can be modified as desired to ensure compatibility with a wide variety of light sockets known in the art, including but limited to, high-output sockets used in signs and outline lighting systems. Accordingly, the term "socket" as used in this disclosure, should also not be construed as limiting, as the lighting system of the present invention can be configured to integrate with a variety of known socket configurations. **Claim 5, *Socarras Provisional***: The lighting system of claim 1, wherein said cross section is I-beam shaped such that a channel is formed along each of said first side and said second side of said divider.