

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Unirac, Inc.  
Petitioner,

v.

Ecofasten Solar, LLC  
Patent Owner

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U.S. Patent No. 10,763,777  
Title: Roof Mounting System

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IPR Case No.: IPR2021-00532

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**ECOFASTEN'S PRELIMINARY RESPONSE TO PETITION FOR *INTER PARTES*  
REVIEW OF U.S. PATENT NO. 10,763,777**

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## ECOFASTEN'S LIST OF EXHIBITS<sup>1</sup>

Exhibit #	Description
<b>2001</b>	Declaration of Barry Cinnamon
<b>2002</b>	Curriculum Vitae of Barry Cinnamon
<b>2003</b>	Wentworth Brochure
<b>2004</b>	Notice of References cited from U.S. Pat. Application Serial No. 13/166,542
<b>2005</b>	Table of the '777 Family
<b>2006</b>	IDS from the '299 Patent
<b>2007</b>	Office action dated 21 January 2016 in Application Serial No. 15/083,472
<b>2008</b>	U.S. Patent No. 8,153,700
<b>2009</b>	Japanese Publ. No. JP2003/336355
<b>2010</b>	German Publ. No. DE 10 2005 018 687
<b>2011</b>	Japanese Publ. No. JP1983/194642

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<sup>1</sup> All citations to issued patents are to column:line, and all citations to patents applications are to the original page or paragraph number of the Application as published.





## I. INTRODUCTION

Pursuant to 35 U.S.C. § 313 and 37 C.F.R. § 42.107, Patent Owner, Ecofasten Solar, LLC (“Ecofasten”) submits the following Patent Owner Preliminary Response to the Petition for *Inter Partes* Review IPR2021-00532 (the “Petition”) of claims 1-14 and 16-24 (“the Challenged Claims”) of U.S. Patent No. 10,763,777 (“the ‘777 Patent”) filed by Petitioner, Unirac, Inc. (“Unirac”).

The Board should not institute a trial. Unirac has not satisfied the threshold for instituting *inter partes* review under 35 U.S.C. § 314(a). Unirac fails to establish a *prima facie* case of obviousness by omitting reasonable analysis of three of four *Graham* factors in each claim. Unirac also offers motivation to modify the Wentworth reference contrary to the teachings of Wentworth itself and practice of the Wentworth invention. Unirac’s combination of prior art elements creates a structure that does not comport with the teachings of the art or the general engineering principles known to person of ordinary skill in the art (POSA). Unirac lacks the required likelihood of invalidating a single Challenged Claim.

The Board should also exercise its discretion to deny institution of inter partes review under 35 U.S.C. § 325(d) if it finds Unirac met the minimum threshold for institution. Unirac’s obviousness positions rely on substantially the same art and arguments considered by the Office during prosecution. Unirac also fails to establish material error by the Examiner, because the only error explicitly alleged by Unirac contradicts the record.

## II. OVERVIEW OF THE PATENTED TECHNOLOGY

The ‘777 Patent, entitled *Roof Mounting System*, is generally directed to systems “for mounting a structure to a roof.” EX-1001, Summary 2:66-67. Without limiting the scope of the

‘777 Patent or arguments Ecofasten may subsequently present, this summary serves as context for the Response. Claim 1 of the ‘777 Patent is representative and recites:

*1. A roof mount assembly comprising:*  
*a flashing including a top surface, a bottom surface, and an upwardly extending projection with the flashing defining a first aperture extending through the upwardly extending projection between the top surface and the bottom surface;*  
*a preformed rubber seal including a first end portion forming a first circular disk having a first planar end surface, a second end portion forming a second circular disk having a second planar end surface, and a central portion between the first end portion and the second end portion, the preformed rubber seal defining a cylindrical second aperture centrally located in the preformed rubber seal and extending from the first planar end surface to the second planar end surface;*  
*an L-shaped bracket supportable on the flashing, the L-shaped bracket including an elongate body portion defining a third aperture and a flange defining a fourth aperture sized to receive the preformed rubber seal and the upwardly extending projection, the fourth aperture including a first aperture portion having a first cylindrical shape and defining a first diameter and a second aperture portion having a second cylindrical shape and defining a second diameter that is less than the first diameter;*  
*a washer including a polymeric compression portion and a rigid backing portion and defining a fifth aperture; and*  
*a screw including a head and extending through the first aperture, the cylindrical second aperture, the fourth aperture, and the fifth aperture, to secure the L-shaped bracket and the flashing and inhibit fluid flow through the first aperture.<sup>2</sup>*

The roof systems and roof mount assemblies of the ‘777 Patent are “operable to support any of a variety of roof-mounted fixtures, such as, for example, snow fences, solar panels, an antenna, signs, billboards, or any of a number of other roof-mountable assemblies.” *Id.* at 6,7:67-4. The ‘777 Patent states “[d]epending on one or more of the geographic location, anticipated

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<sup>2</sup> Claim language included in this Patent Owner Preliminary Response is quoted in *italics* to distinguish the claim language from other quoted material.

quantity and type of precipitation, and anticipated roof and wind loading, the roofing system 10 can include any of a variety of flashing, seal and bracket arrangements.” *Id.* 7:4-8. “The roofing system 10 inhibits leakage of fluids through the flashing 16, and, in some embodiments, may also or alternately inhibit leakage of fluids beyond the flashing to portions of the substrate 14 or areas below the substrate” of a roof. *Id.* 7:20-24.

### **III. THE PERSON OF SKILL IN THE ART**

For purposes of this Response only, Ecofasten does not challenge Unirac’s proposed POSA or Unirac’s proposed claim construction. Ecofasten reserves all arguments relating to these issues if the Board institutes *inter partes* review.

### **IV. THE PETITION DOES NOT SATISFY THE STATUTORY THRESHOLD FOR INSTITUTING *INTER PARTES* REVIEW UNDER 35 U.S.C. § 314(a)**

The Petition alleges two grounds of unpatentability based on obviousness. Both grounds are founded on dubious motivations to modify prior art references in unworkable ways incorporating features unsupported by the prior art. Unirac is unlikely to prevail in invalidating any of the challenged claims on its proposed grounds.

The Board is authorized to institute a petition for *inter partes* review only where “the information presented in the petition . . . shows that there is a reasonable likelihood that the Petitioner would prevail with respect to at least 1 of” the Challenged Claims. 35 U.S.C. § 314(a); 37 C.F.R. § 42.108(c). The Board “may deny all grounds for unpatentability for all of the challenged claims” before institution. 37 C.F.R. § 42.108(b).

Unirac bears the burden of demonstrating “a reasonable likelihood that at least one of the claims challenged in the petition is unpatentable.” 37 C.F.R. § 42.108(c). “To satisfy its burden of proving obviousness, a Petitioner cannot employ mere conclusory statements.” *In re Magnum*

*Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016). “The Petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *Id.* Unirac must demonstrate both “that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.” *Id.* at 1381.

“[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017) (citing *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007)) (internal quotations omitted). Prior art references must be considered as a whole. Unirac may not simply select “bits and pieces from prior patents.” *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1578 (Fed. Cir. 1987). Hindsight cannot “be the thread that stitches together prior art patches into something that is the claimed invention.” *Metalcraft of Mayville*, 848 F.3d at 1367.

Unirac alleges claims 1-5 and 10-14 of the ‘777 Patent are obvious (“Ground 1”) based on U.S. Patent No. 7,762, 027 (“Wentworth”) in view of U.S. Patent No. 6,185,885 (“Thaler”), further in view of U.S. Patent No. 3,168,321 (“Glicksman”). Unirac asserts that claims 6-9 and 16-24 of the ‘777 Patent are obvious (“Ground 2”) based on Wentworth in view of Thaler, Glicksman, and U.S. Publ. No. 2003/0177706 (“Ullman”). Both Grounds are destined to fail.

Both Grounds rely on Wentworth, Thaler, and Glicksman as disclosing the same features of the Challenged Claims. The Petition cites Wentworth and Thaler as teaching the claimed bracket and seal elements, but Unirac ignores the express teachings of Wentworth and Thaler contrary to the requirement of *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1578 (Fed.

Cir. 1987). Unirac fails to consider references in their entirety. Both references include express teachings contrary to Unirac’s obviousness positions. Unirac ignores unfavorable but explicit teachings of the prior art disclosures. Instead of considering the references in their entirety, Unirac selects “bits and pieces from prior patents” using impermissible hindsight to weave together allegations of obviousness. The Petition fails to establish a reasonable likelihood that the asserted references, and alleged motivations to modify them, would have rendered even one of the Challenged Claims obvious.

**A. The prior art relied on by Petitioner lacks features of the Challenged Claims.**

Both Grounds rely on the combination of Wentworth and Thaler to teach bracket and seal elements required in each Challenged Claim. Unirac fails to identify references that disclose the claimed bracket and seal present in all Challenged Claims. The claimed seal and bracket are beyond the scope and content of the prior art identified by Unirac.<sup>3</sup>

Unirac suggests combining a modified version of Wentworth with its own redesigned grommet, which it attributes to Thaler, to satisfy the claimed bracket and seal elements required in every Challenges Claim. The proposed modifications and redesign of the Thaler grommet contradict express teachings of Wentworth, Thaler, and Glicksman.

**1. Wentworth**

Wentworth discloses “a system for attaching an article to a roof 500 having shingles.” EX-1005, 3:6-7. The system includes “a flashing member 22 and a stanchion 24 connected to the flashing member 22.” *Id.* at 3:7-10. Wentworth teaches an “upstanding sleeve 40 comprises a tube which is oriented perpendicular to flashing 36” (i.e., substantially perpendicular to the roof).

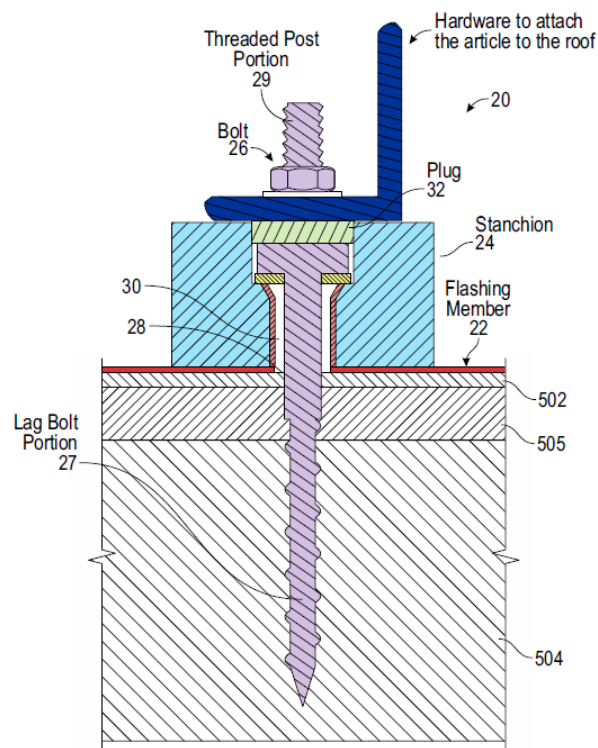
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<sup>3</sup> Ecofasten expressly reserves the right to challenge any elements of Unirac’s obvious position should the petition be instituted.

*Id.* at 3:43-48. Wentworth also teaches “[s]tanchion 24 has a hole 30 for receiving sleeve 40 of flashing member 22 . . . Hole 30 has a flared portion 44 to accommodate flared distal end 42 of sleeve 40.” *Id.* at 3:60-64. In Wentworth:

System 20 also includes a bolt 26 for attaching system 20 to structural member 504 (such as a rafter) of roof 500 . . . Bolt 26 is received by an aperture 28 in flashing member 22 . . . and a hole 30 in stanchion 22 . . . and threadably engages structural member 504 to accept bolt 26. A plug 32 made of rubber or the like is provided for sealing hole 30 to prevent water leaks. In the shown embodiment bolt 26 includes both a lag bolt portion 27 for engaging structural member 504 and ***a threaded post portion 29 for receiving hardware to attach the article to the roof (refer also to FIG. 22).*** System 20 also includes a washer 34 which engages stanchion 22 and bolt 26.” *Id.* at 3:28-36.

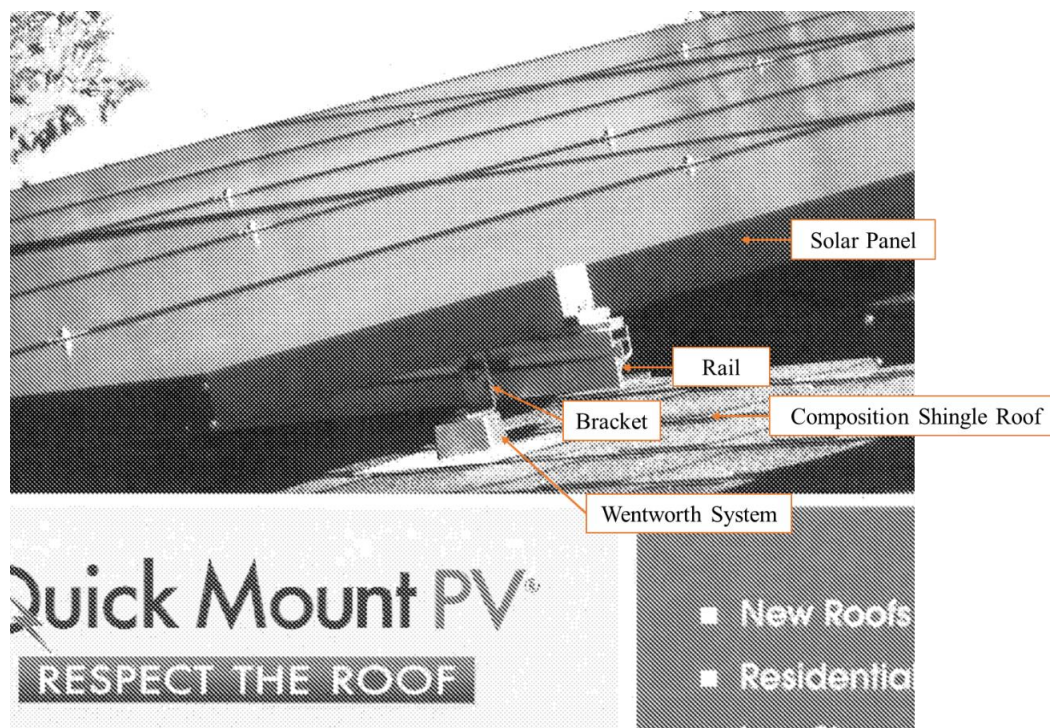
Wentworth teaches an attachment point with a seal that is covered and compressed by the “hardware to attach the article to the roof.” *Id.*; EX-2003, p. 1.



A brochure advertising Quick Mount PV was disclosed and considered during prosecution and in the file wrapper of the ‘777 Patent. EX-1002, pp. 73-99. Quick Mount PV

was the business operated by the inventors of Wentworth, Mr. and Mrs. Wentworth. EX-2003, p.

1. The brochure depicts the Wentworth system installed on a roof. *Id.*



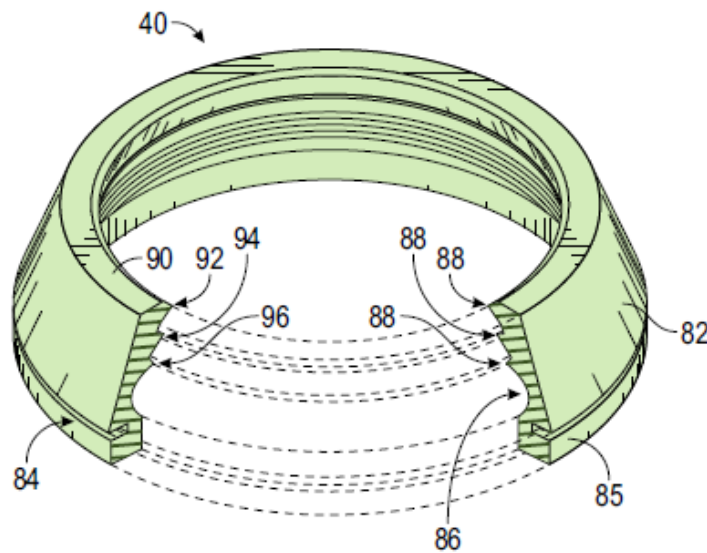
Unirac mischaracterizes the stanchion of Wentworth as a bracket. *See, e.g., Petition*, p.

21. There is no mention of a bracket in Wentworth. The distinction matters. ***The Wentworth invention was designed to retain a bracket atop the stanchion.*** EX-2001, ¶47. If the Wentworth references were to mention a bracket, it would be in a manner consistent with the Wentworths' product as depicted in the Quick Mount PV brochure, which shows an L-foot bracket mounted on the Quick Mount stanchion, the stanchion angled relative to the pitch of the roof. *Id.*

## 2. Thaler

Thaler is directed "to roof flashings of the type which provide a waterproof and weather resistant seal between a roof of a building structure and pipes, vent stacks, support members for roof mounted apparatus, or other elongate members projecting from the roof." EX 1006, 1:4-9. The background of Thaler provides that the structures employed in roof flashings and grommets

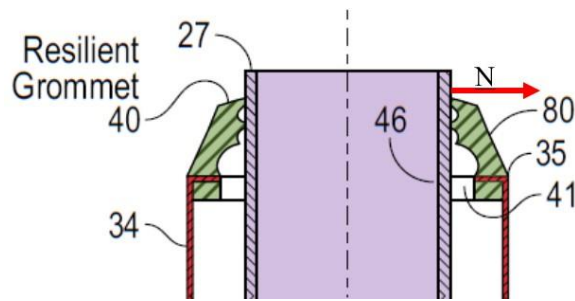
should be shaped and installed “to effectively shed precipitation and avoid accumulation or pooling of water and ice on the flashing.” *Id.* at 1:56-57. The grommet of Thaler “comprises three inwardly tapered circumferentially extending lips 92, 94 and 96 disposed in downwardly outwardly stepped relation coaxial with the boss portion 34, said lips 92, 94 and 96 having internal diameters of downwardly increasing magnitude.” *Id.* at 7:6-10 and Fig. 5.



**FIG. 5**

In Thaler, the “lips 92, 94 and 96 having internal diameters of downwardly increasing magnitude” so that the grommet can accommodate different diameter vent pipes. *Id.* The interaction between the sealing lips of the resilient grommet and the elongate member in Thaler create a radial loading scheme where the diameter of the one or more sealing lips is smaller than the outer diameter of the pipe. EX-2001, ¶50. The water shedding arrangement of the Thaler grommet works by interference fit, in a manner similar to fitting a rubber collar around a plumbing vent pipe. *Id.* A portion of Fig. 1 from Thaler is reproduced below and annotated to demonstrate the normal force  $N$  exerted by elongate member 26 loading the lips of resilient grommet 40 during typical operation. *Id.*



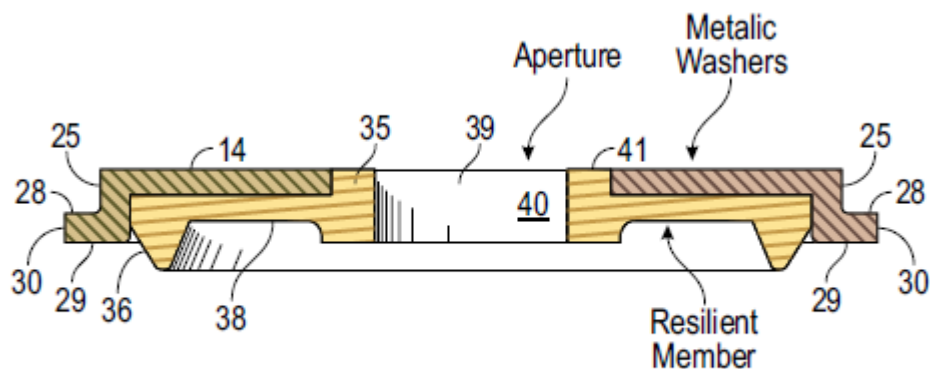


The resilient grommet of Thaler does not operate under a compressive load like that of the load imparted by fasteners on seals in the Challenged Claims. *Id.* at ¶51. Unirac in its argument redesigns the resilient grommet in Thaler to meet the limitations of Ecofasten’s claimed seal. Thaler serves as nothing more than a starting point for Unirac to draw Ecofasten’s novel seal and attempt to tack back to Thaler’s priority date. By the time Unirac finishes conjuring its desired seal configuration, “Thaler” no longer seals by axial interference and no longer uses sealing lips. Instead, the “Thaler” seal is contorted from a radial loading arrangement to a loading arrangement that allegedly seals by compression, despite the express teaching of Thaler. *See*, EX 1006, 6,7:63-10.

Unirac’s modified version of the Thaler seal was not part of the prior art as of the priority date for the ‘777 Patent. Neither Thaler nor any other reference identified by Unirac discloses the seal required by the Challenged Claims. The seal design relied on by Unirac is beyond the scope and content of the prior art. EX-2001, at ¶52.

### 3. Glicksman

Glicksman is directed to “sealing washers, of a type adapted to be disposed beneath a screw head or similar fastening structure.” EX 1007, 1:8-10. Glicksman discloses “a metallic washer element 11 and a resilient washer element 12.” *Id.* at 3-4. *See also*, Fig. 5.



**FIG. 5**

Glicksman teaches that the sealing washer is “pressed against the flat surface of a sheet metal body or casing to effect a hermetic seal.” *Id.* at 1:10-11. Glicksman expressly teaches that the resilient member engages a flat surface. In Glicksman, “an improved resilient composite washer construction in which the opening therein is of smaller diameter than the accommodated threaded shank of a fastener, wherein the same may be distorted to effect a hermetic seal about the threads of the shank.” *Id.* at 1:24-28.

#### **4. Ullman**

Ullman discloses a “mounting system for elevating and supporting objects such as solar panels . . . upon the roofs of . . . buildings.” EX 1008, Abstract. Ullman teaches “[r]oof mount 10 comprises base section 17, stanchion 42 along with threadably connected mounting bolt 40 and washer 50.” *Id.* ¶0148. Ullman notes that one of the improvements of the system is that “[t]he PV modules and module support rail can be elevated from the roof to allow for existing roof obstructions such as pipes and conduits.” *Id.* ¶0096 Ullman states “[o]nce the roof is in a condition for installing a solar panel, a pair of C-shaped elongated horizontal members 54 are provided.” *Id.* at ¶0148. Ullman teaches that solar panels may be secured to the “elongated horizontal members” with “end clamps” and “bi-modules clamps.” *Id.* See, ¶0154-0157. The stanchion 42 of Ullman elevates the support rail and the PV modules from the roof.

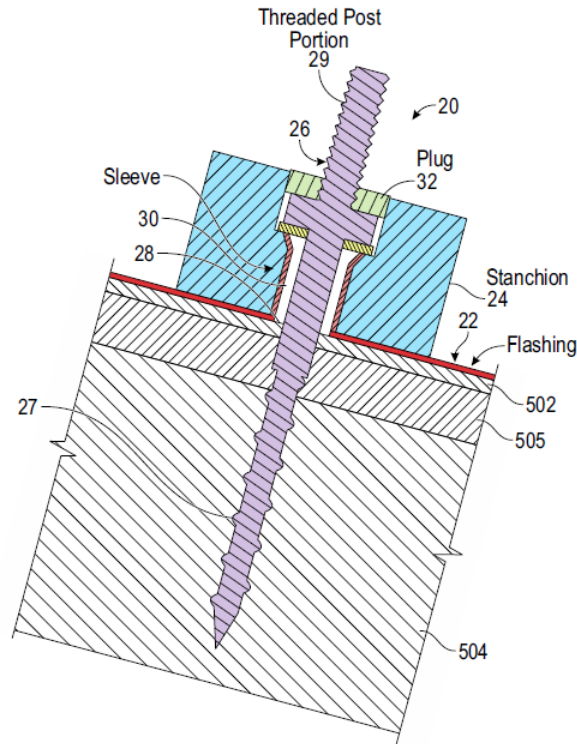
**B. Unirac identifies no reasonable motivation to modify Wentworth with the teachings of Thaler, Glicksman, or Ullman because Unirac’s espoused motivation contradicts the Wentworth reference and the Wentworths’ well-known reduction to practice.**

No POSA would modify Wentworth as Unirac suggests. Unirac mischaracterizes Wentworth by overlooking the operation of Wentworth’s devices and the express teachings of Wentworth to justify modification. The alleged motivations to modify Wentworth offered by Unirac do not exist. The physical arrangement of the Wentworth system forecloses the alleged motivations.

Wentworth’s system “pertains to attaching articles such as photovoltaic panels to the roof of a structure, and more particularly to a system which is installed on the roof to serve as an anchor for the articles.” A POSA understands the basic operation of a roof as well as a layperson. A roof keeps the elements out of a structure. EX-1005, 1:6-9. Unirac contends:

Wentworth’s assembly discloses a seal 32 to prevent water from leaking into the hole 30 of stanchion, and further through the aperture of the flashing 22. The seal 32 is located at the top of the stanchion, and is not held in place by the compressive force of the fastener, but instead is located external to the fastener, uncovered and potentially exposed to the elements, and thus may deteriorate, degrade or loosen over time such that water is able to leak through the hole in the flashing projection. EX-1003, ¶ 74.

Unirac also offers Fig. 3 from Wentworth to reinforce this position. However, a POSA would not only install Wentworth on the roof. A POSA would recognize that Wentworth is an attachment point, from which a POSA would attach hardware (e.g., a bracket, rail, etc.). Because one of the primary functions of the roof is to protect structure, a POSA would not penetrate the roof (through, e.g., a hole), without a purpose – that is to attach an article in a watertight arrangement as provided by Wentworth.



Unirac ignores the explicit teachings of Wentworth in making the above assertions. The Wentworth roof attachment creates a mounting point – that is “*a threaded post portion 29 for receiving hardware to attach the article to the roof.*” EX-1005, 3:28-36. Hardware, such as an L-foot bracket, gets fastened onto the top of stanchion 24 and plug 32 in Wentworth. *Id.* EX-2001, ¶ 64. Retaining hardware is the reason for the existence of threaded portion 29 and stanchion 24 according to Wentworth itself. EX-1005, 3:28-36. Moreover, the plug is compressed by the *hardware* when the hardware is secured to the *threaded post portion*. *Id.*

Wentworth and the Wentworths’ commercial activities in furtherance of their business, Quick Mount PV,<sup>4</sup> align with commonly known usage of the Wentworth attachment point and

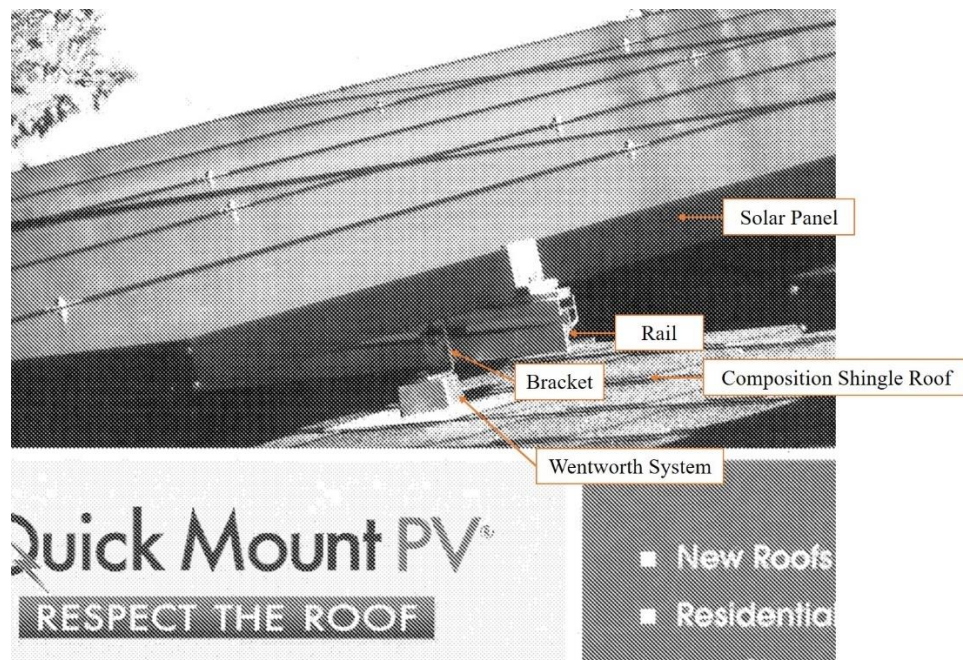
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<sup>4</sup> Wentworth is owned by Wencon Development, Inc. dba Quick Mount PV, which is owned by Ecofasten’s parent company, Esdec, Inc.

hardware, including L-foot brackets. *Id.* at ¶ 64. Included in the prosecution history of the ‘777 Patent is a brochure from Quick Mount PV. EX-1002 pp. 73-99. Quick Mount PV was owned by Claudia and Stuart Wentworth, the inventors named in Unirac’s Wentworth reference.

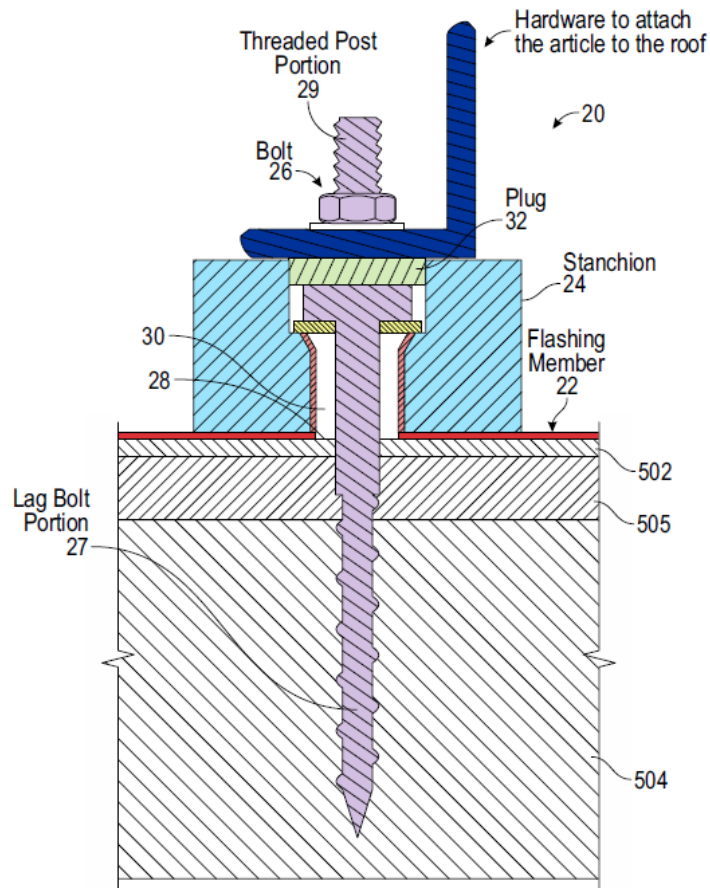
The brochure shows the Wentworth system attached to a composition shingle roof. *Id.* at ¶ 65. The brochure also shows an L-shaped bracket positioned on the stanchion of Wentworth. *Id.* Attached to the bracket is a rail, which has a solar panel mounted to it. *Id.* This figure is demonstrative of the teachings of Wentworth reduced to practice. *Id.*

Typical installation of the Wentworth system is well within the knowledge of a POSA. *Id.* at ¶ 67. The advertised installation in Mr. and Mrs. Wentworth’s brochure shows that the seal that Unirac contends is exposed to the elements is not exposed at all. *Id.* The seal is covered by a bracket and is compressed into the stanchion. *Id.*



For clarity, depicted below is a modified version of Fig. 3 from Wentworth including the features described in Wentworth itself and shown in the Wentworths’ brochure, which was again disclosed during prosecution of the ‘777 Patent. EX-1002 pp. 73-99. The features explicitly

described in Wentworth include bolt 26 with “both a lag bolt portion 27 for engaging structural member 504 and a threaded post portion 29 for receiving hardware to attach the article to the roof.” EX-1005, 3:28-36.



The Wentworths’ brochure depicts the Wentworth system “receiving hardware to attach the article to the roof,” precisely as taught by Wentworth and depicted above. *Id.*; *See also*, EX-2003. The depiction includes actual hardware used in conjunction with the system disclosed in the Wentworth reference in roof installations. EX-2001, ¶ 69. A POSA would be familiar with Wentworth’s express teachings and practical application. *Id.* In practice, Wentworth contemplates a bracket installed on and secured to stanchion 24 by the threaded post portion 29,

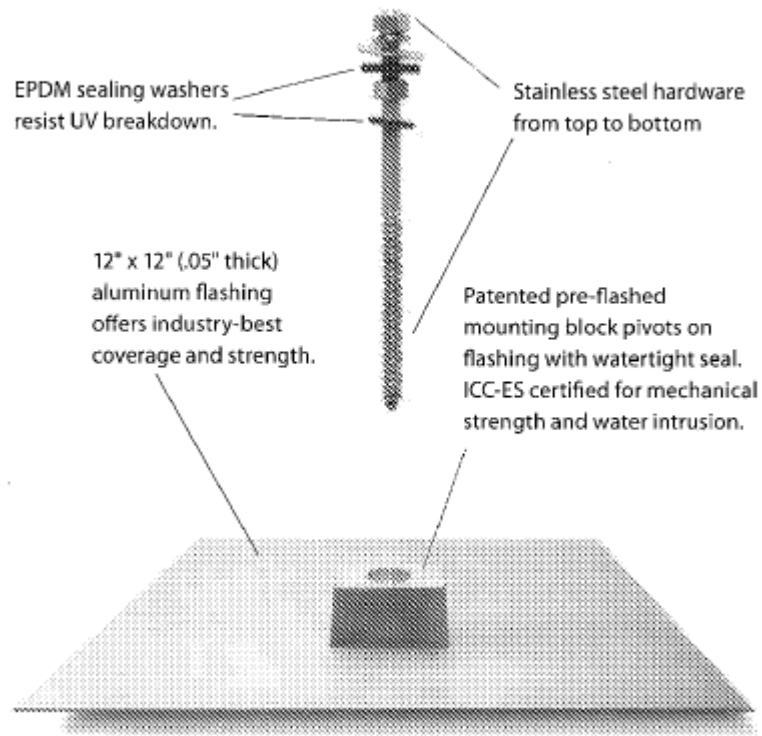
a washer and a nut. *Id.* That is why Wentworth's lag bolt includes threaded post portion 29 protruding from plug 32. *Id.*

Unirac mistakenly contends both that the seal in Wentworth "is not held in place by the compressive force of the fastener" and that the seal in Wentworth is "exposed to the elements." *Petition*, p. 27. This statement directly contradicts the Wentworth disclosure as well as the Wentworths' own reduction to practice on two fronts. *Id.* at ¶ 70.

In contrast to Unirac's espoused motivation, the seal in Wentworth is held in place by the compressive force of the fastener as it drives the bracket into the stanchion. *Id.* at ¶ 71. Even if POSA only knew of art cited in the file wrapper, a POSA would have access to Wentworth and the Wentworths' brochure. Wentworth itself describes the bolt as having "a threaded post portion 29 for receiving hardware to attach the article to the roof." EX-1005, 3:28-36. The threaded post portion described in Wentworth is a component of a fastener, as is any threaded nut or other retention means that threads to a threaded post. *Id.* The Wentworth's brochure as excerpted above further depicts an L-shaped bracket fastened to the top of the stanchion by a fastener. *Id.*

Below from the same brochure, the Wentworths depict their mounting system without the L-bracket. EX-2003, p. 5. Even in a practical application of the Wentworth system without an L-bracket used to mount solar panels, the seal is compressed into the stanchion by the fastener. *Id.* at ¶ 72. The seal is certainly not "located external to the fastener" as stated by Unirac. *Id.*

## Superior Waterproofing Technology



Unirac is wrong. The seal in Wentworth is held in place between the stanchion and bracket by the compressive force of the fastener. *Id.* at ¶ 73.

Unirac's assertion that the seal in Wentworth is "uncovered and potentially exposed to the elements" is also patently false. *Petition*, p. 27. In Wentworth, the seal is covered when the threaded post portion 29 receives mounting hardware as shown on the cover page of the Wentworths' brochure. EX-2001, ¶ 74.; *see also*, EX-2003, p. 1. Even in the embodiment without the L-bracket present from page 5 of the Wentworths' brochure, the EPDM sealing washer is covered by a stainless-steel washer having a greater diameter than the sealing washer. *Id.*; *see also*, *Id.* at p. 5. Again, Unirac is wrong. The seal in Wentworth is covered and not exposed to the elements. *Id.*; *see also*, *Id.* at p. 1.



Unirac suggests that Ullman teaches a modification to the bracket of Wentworth. Ullman discloses a stanchion just like Wentworth. In both instances, the stanchion is configured to receive a bracket to create an elevated mounting position on a roof. EX-2001, ¶ 75. While the stanchion structure in each of the disclosures is different, neither stanchion is a bracket. Rather, both structures operate as a spacer to create an elevated attachment point for a bracket. *Id.* The elevated attachment points in Ullman and Wentworth position the sealing interfaces above any snow, ice, or water pooling or running down a roof. *Id.*

There is nothing in Ullman that would suggest that the stanchion of Wentworth be modified to include additional structure, because both the stanchion of Wentworth and the stanchion of Ullman are elevated attachment points for brackets or module support rails. *Id.* at ¶ 76. To suggest any other modifications would be to ignore the disclosure of each reference and the construction conventions relied upon by a POSA. *Id.*

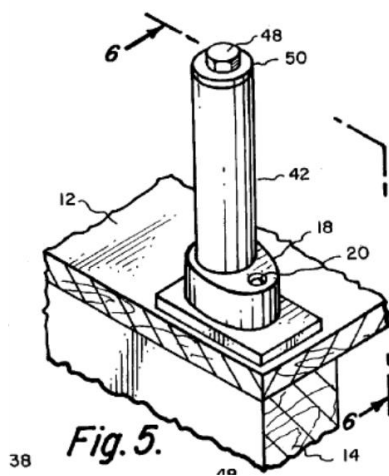


FIG. 5 of Ullman showing stanchion 41 (EX-1009, p. 3)

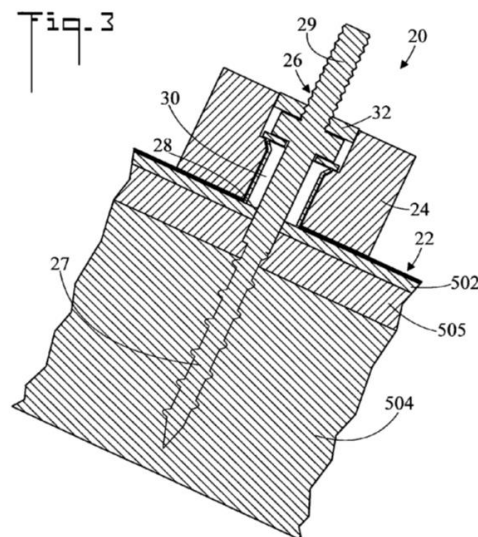


FIG. 3 of Wentworth showing stanchion 24 (EX-1005, p. 3)

Unirac offers no reasonable motivation to modify Wentworth, because Unirac's motivation to modify Wentworth contradicts Wentworth itself. Without a motivation, POSA

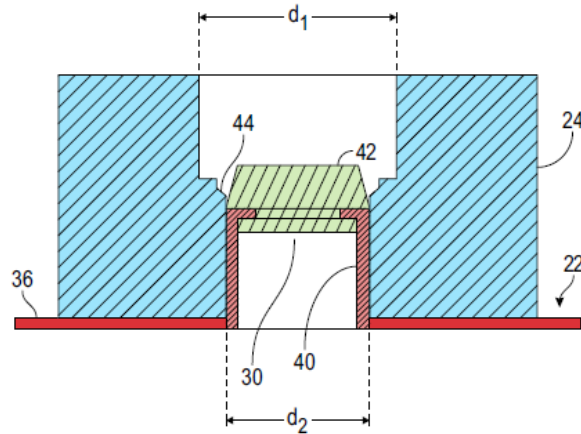
would have no reason to modify Wentworth with the teachings of Thaler or Glicksman or Ullman. The lack of any feasible motivation to modify Wentworth is sufficient to prevent Unirac from invalidating even a single Challenged Claim.

**C. A POSA would have no reasonable expectation of success in modifying Wentworth with Thaler as proposed by Unirac, because the modifications are unworkable and exceed the scope content of the prior art.**

Even if a POSA had a motivation to modify Wentworth, they would not modify Wentworth with the teachings of Thaler. With Thaler, Unirac materially mischaracterizes the reference, redesigns a seal with impermissible hindsight, and ignores the express teachings of the references.

The resilient grommet of Thaler “comprises three inwardly tapered circumferentially extending lips 92, 94 and 96 disposed in downwardly outwardly stepped relation coaxial with the boss portion 34, said lips 92, 94 and 96 having internal diameters of downwardly increasing magnitude.” EX 1006 7:6-10. This arrangement allows the grommet of Thaler to engage the variable outer diameter of a vent pipe, such that the sealing lips of Thaler are loaded radially. EX-2001, ¶ 70.

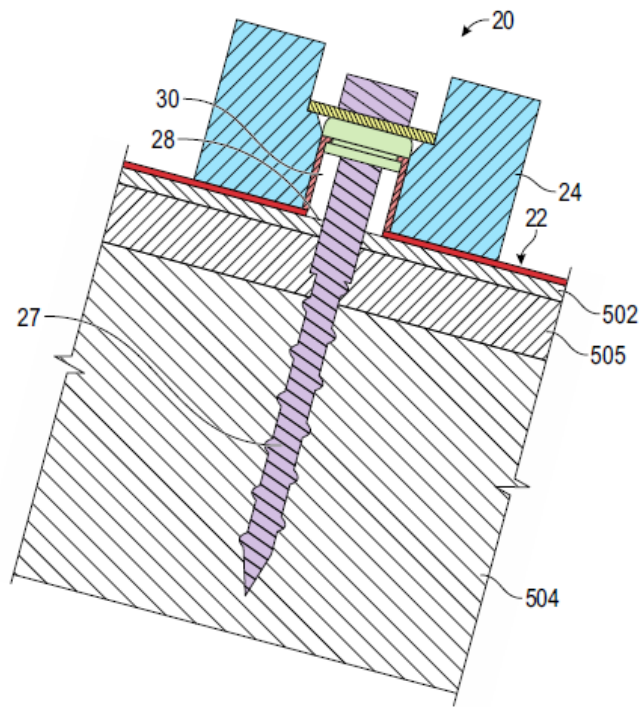
Unirac redesigns the entire structure of Thaler, purportedly solving a problem in Wentworth that does not exist. Unirac drew the heavily modified Fig. 18 below from Wentworth including the redesigned seal of Thaler. *Petition*, p. 46.



Modified Fig. 18

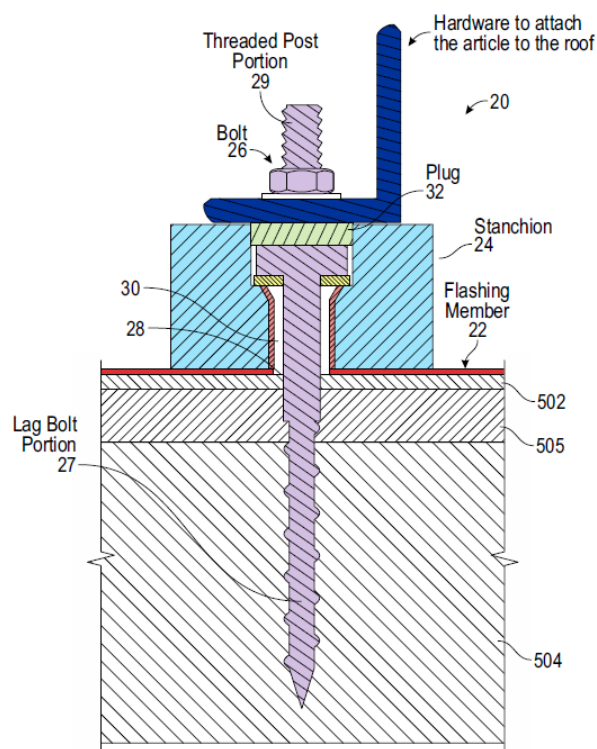
Unirac then adds a fastener and the washer of Glicksman to arrive at the solution shown below. The alleged solution includes the flashing of Wentworth with the redesigned Thaler grommet and the washer of Glicksman. To arrive at this arrangement, Unirac modifies the swaged end of the flashing of Wentworth that contemplates a compressed seal, then replaces the seal of Wentworth with its redesigned seal. In addition to changing the contours of the Thaler grommet, Unirac changes the mode of operation from being a radially loaded grommet to an axially compressed seal. EX-2001, ¶ 81. Thaler thus does not even teach the seal Unirac is forcing into Wentworth for its obviousness positions. *Id.*

Unirac cites no reference that teaches or suggests that Unirac's redesigned seal and flashing would support a compressive load from a fastener and washer. Although they are mistaken for reasons above, Unirac explicitly states that the seal in Wentworth "is not held in place by the compressive force of the fastener." *Petition*, p. 27.



More importantly, a POSA would not have a reasonable expectation of success modifying Wentworth as described in the Petition because the proposed modifications result in an assembly that would pool water above the top of the fastener in the open void of the stanchion. EX-2001, ¶ 83. The assembly proffered by Unirac ignores the overt teachings of Thaler that roof flashings and grommets should be shaped and installed “*to effectively shed precipitation and avoid accumulation or pooling of water and ice on the flashing.*” EX-1006 at 1:56-57. As a result of heating and freezing cycles, pooling water over a resilient sealing material is likely to result in leakage over time. *Id.* This is one reason Wentworth’s elevated water seal has been successful. Review of Fig. 3 from Wentworth in light of the Wentworths’ reduction to practice shows the void in the stanchion is filled with a fully loaded assembly that allows for a compressed elevated water seal. *Id.* Ecofasten’s modified version of FIG. 3 showing the

mounting hardware from the Wentworths' brochure over the stanchion is again reproduced below for reference.



Unirac's proposed modifications also contradict Glicksman. Glicksman teaches that a hermetic seal is achieved by engagement of the threads of the fastener with the resilient material of Glicksman, which Unirac has omitted in Fig. 3. EX-1007, 1:27-28. Unirac proposes using Glicksman with a smooth shank fastener. As a result, the threads of the fastener in Unirac's proposed modification would engage the seal of Glicksman before the seal came to rest against the smooth shank. Engagement with the threads would deform the resilient material and create a path for pooled water in the cup of the stanchion to leak along the smooth shank of the fastener to drain the pooled water into the roof penetration created by the fastener. EX-2001, ¶ 84.

Glicksman also teaches that its washer should be compressed against a flat surface. EX-1007, 1:8-12. However, instead of compressing the Glicksman washer against a flat surface,

Unirac suggests engaging only the outer perimeter of Glicksman with a tapered surface. *Petition*, p. 48.

Unirac also fails to identify in the prior art a bracket that functions as an attachment point for solar racking. EX-2001, ¶ 86. Unirac modifies Fig. 21 of Wentworth with a “blue body” structure to create an L-shaped bracket. *Petition*, pp. 41-42. Unirac justifies adding the “blue body” justifying the modification “to allow for applications requiring a fastener to be positioned horizontally in the mounting assembly.” But Wentworth already enables such a configuration when it teaches “[c]onnection for receiving hardware to attach the article to the roof is effected by two threaded holes 46” in the same FIG. 21 modified by Petitioner. Wentworth uses mounting hardware to solve Petitioner’s alleged problem, as pictured in in the Wentworths’ brochure.

Petitioner offers no reasonable motivation to make its proposed modification to Wentworth. The petition does not establish a *prima facie* case of obviousness. Unirac therefore cannot have a reasonable likelihood of invalidating any of the Challenged Claims. Institution should be denied.

**D. The Petition fails to articulate a *prima facie* case for any of the Challenged Claims.**

The Supreme Court in *KSR Int’l.* reiterates that the obvious analysis should contemplate four factors: (1) “the scope and content of the prior art,” (2) “differences between the prior art and the claims at issue,” (3) “the level of ordinary skill in the pertinent art,” and (4) “secondary considerations” such as “commercial success, long felt but unsolved needs, failure of others, etc.” 550 U.S. at 399 (2007) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966)). In assessing obviousness, “[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning.” *KSR Int’l.* 550 U.S. at 421 (citing *Graham*, 383 U.S. at 36 (warning against a “temptation to read into the prior

art the teachings of the invention in issue” and instructing courts to “guard against slipping into use of hindsight”).

In addition to satisfying the Graham factors, Unirac must demonstrate both “that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016).

Petitioner does not follow the obviousness framework established in *Graham v. John Deere* and reaffirmed in more recent precedent like *KSR* and *Magnum Oil Tools*. Unirac thus fails to establish a *prima facie* case of obviousness. Unirac relies on seals and brackets outside the scope and content of the prior art it identifies in its obviousness positions, failing the first *Graham* factor. Unirac does not identify meaningful differences between its hand-picked prior art references and the Challenged Claims, failing the second *Graham* factor. Unirac gives no treatment to the fourth Graham factor, secondary considerations.

Petitioner suggests motivations to modify Wentworth that contradict the Wentworth reference and reduction to practice. A POSA would not be motivated to solve alleged shortcomings of Wentworth offered by Petitioner, because problems identified by Petitioner do not exist in the Wentworth system. Even if the problems did exist, the result of Petitioner’s proposed modifications is a novel creation with which a POSA would not expect success.

Instead of following the well-established framework for assessing obviousness, Unirac redesigns pieces from the prior art, omits relevant parts of the prior art, and offers fictitious motivations to modify references. Hindsight is the thread that stitches together its obviousness position. The *bracket* and *seal* required by each of the Challenged Claims illustrates the deficiency of Unirac’s position.

**1. Unirac is unlikely to invalidate Claim 1 or any of its dependent claims because it has not established even a *prima facie* case of obviousness for claim 1.**

Claim 1 patentably distinguishes over Wentworth, Glicksman, and Thaler because Unirac has not established a *prima facie* case of obviousness over these references. Claims 2-5 depend on claim 1 and patentably distinguish over Wentworth, Glicksman, and Thaler for the same reasons.

**i. Unirac’s fails to establish the first *Graham* factor because the prior art references relied on do not disclose the “preformed rubber seal” or “L-shaped bracket” features of claim 1.**

The first *Graham* factor requires Petitioner to determine “the scope and content of the prior art.” *Graham*, 383 U.S. at 16. Neither the seal nor the L-shaped bracket recited in claim 1 are disclosed in the prior art selected by Petitioner.

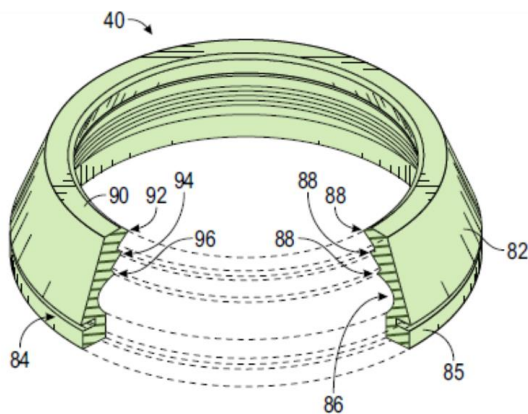
Claim 1 requires a particular seal:

*a preformed rubber seal including a first end portion forming a first circular disk having a first planar end surface, a second end portion forming a second circular disk having a second planar end surface, and a central portion between the first end portion and the second end portion, the preformed rubber seal defining a cylindrical second aperture centrally located in the preformed rubber seal and extending from the first planar end surface to the second planar end surface (the claim element referred to as “[1b]”).* EX 1001, 33:38-46.

Unirac fails to identify a prior art reference that discloses a seal containing “*the preformed rubber seal defining a cylindrical second aperture centrally located in the preformed rubber seal and extending from the first planar end surface to the second planar end surface*” as required by the express language of claim 1. None of the Wentworth, Thaler, or Glicksman references disclose such a seal.

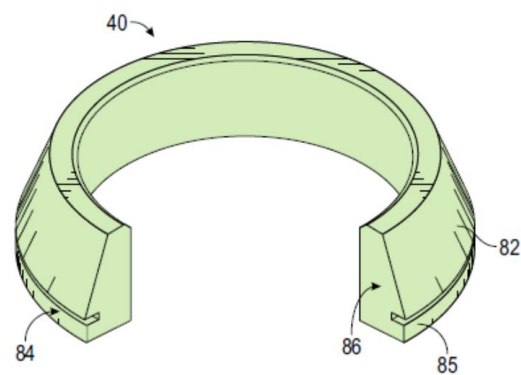


Instead of relying on explicit disclosures of a prior art reference, Unirac identifies a seal that is loaded radially and sized to accommodate variable diameter roof vents in Thaler. Unirac then redesigns the seal to look nearly identical to the seals disclosed in Figs. 6 – 8A of the ‘777 Patent. To demonstrate the dramatic departure of the Thaler seal with Unirac’s seal, Ecofasten juxtaposes both seals below. The seal created by Unirac is thus beyond the scope and content of the prior art of Ground 1 for purposes of assessing the first *Graham* factor.



**FIG. 5**

The seal of Thaler as originally disclosed in Thaler.



**FIG. 5**

The seal of Thaler as redesigned by Unirac

Claim 1 also requires a specific bracket:

*an L-shaped bracket supportable on the flashing, the L-shaped bracket including an elongate body portion defining a third aperture and a flange defining a fourth aperture sized to receive the preformed rubber seal and the upwardly extending projection, the fourth aperture including a first aperture portion having a first cylindrical shape and defining a first diameter and a second aperture portion having a second cylindrical shape and defining a second diameter that is less than the first diameter (the claim element referred to as “[1c]”).* EX 1001, 33:39-56.

Unirac fails to identify a prior art reference that discloses a bracket containing a “*an L-shaped bracket . . . including an elongate body portion . . . and a flange*” as required by the express language of claim 1. None of the references of Wentworth, Thaler, or Glicksman mention a bracket. Instead, Unirac identifies the stanchion of Wentworth as a bracket, without

identifying the “*L-shaped bracket*,” the “*elongate body portion*” or the “*flange*,” which are expressly recited in and required by the claim 1. Unirac then, without explanation, includes a “blue body” at page 42 of the Petition or a reference in Ground 1 that discloses that element. The bracket created by Unirac is thus beyond the scope and content of the prior art of Ground 1 for purposes of assessing the first *Graham* factor.

**ii. Unirac fails to establish the second *Graham* factor because it does not identify the differences between its selected prior art and claim 1.**

The second *Graham* factor requires Petitioner to ascertain “the differences between the prior art and the claims at issue.” *Graham*, 383 U.S. at 16.

Petitioner does not identify a single word from the “*preformed rubber seal*” element of claim 1 that is missing from Wentworth’s disclosure. Accordingly, Petitioner fails to establish the second *Graham* factor.

Petitioner similarly does not identify claim language that Wentworth fails to teach for the “*L-shaped bracket*.” Petitioner simply states, “Wentworth does not expressly disclose that its stanchion or bracket has a ‘body portion.’” *Petition*, p. 40. Claim 1 recites far more than a body portion in defining the metes and bounds of its “*L-shaped bracket*.” Again, claim 1 recites:

*an L-shaped bracket supportable on the flashing, the L-shaped bracket including an elongate body portion defining a third aperture and a flange defining a fourth aperture sized to receive the preformed rubber seal and the upwardly extending projection, the fourth aperture including a first aperture portion having a first cylindrical shape and defining a first diameter and a second aperture portion having a second cylindrical shape and defining a second diameter that is less than the first diameter*

Wentworth does not disclose an “*L-shaped bracket*” as required in claim 1. Wentworth supports the “*L-shaped bracket*” on a stanchion in practice, not on the “*flashing*” as required by

claim 1. EX-2003, p. 1. Because Wentworth has no “*L-shaped bracket*,” it cannot disclose an L-shaped bracket having:

*an elongate body portion defining a third aperture and a flange defining a fourth aperture sized to receive the preformed rubber seal and the upwardly extending projection, the fourth aperture including a first aperture portion having a first cylindrical shape and defining a first diameter and a second aperture portion having a second cylindrical shape and defining a second diameter that is less than the first diameter.* EX-1001, 33:38-46.

EcoFasten believes the above differences exist between claim 1 and the prior art, among others. Petitioner has not identified these or any other differences between claim 1 and its chosen prior art. Petitioner thus fails to establish the second Graham factor.

**iii. The fourth *Graham* factor weighs in favor of non-obviousness due to commercial success of the claimed invention.**

The fourth Graham factor comprises secondary considerations such as commercial success. Ecofasten has had substantial commercial success selling roof mount products that are within the scope of claim one and include the claimed “*preformed rubber seal*” and “*L-shaped bracket*”. Ecofasten has sales over the last six and a half years exceeding \$35 million, with more than 17 million units sold. EX-2013, p. 2. Commercial success of EcoFasten’s seal, while only a secondary consideration, weighs in favor of non-obviousness of claim 1.

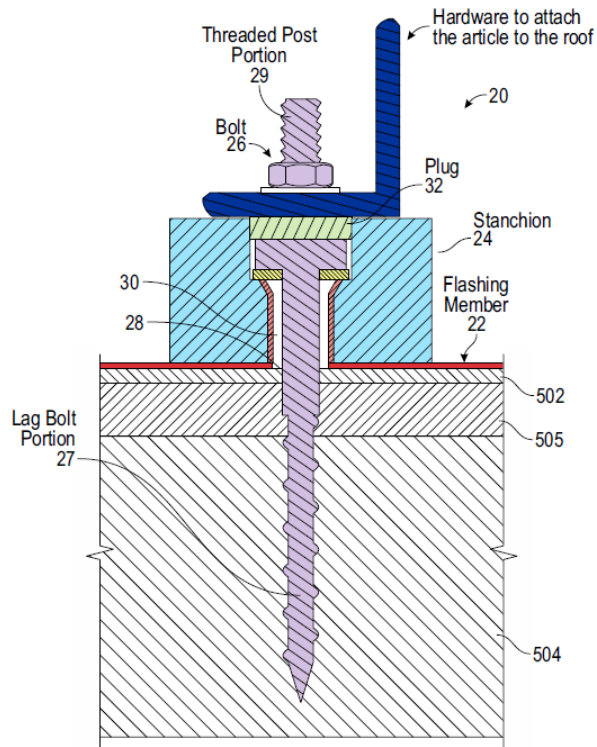
**iv. Petitioner’s stated motivation to modify the Wentworth reference contradicts the Wentworth reference and its reduction to practice.**

In addition to satisfying the Graham factors, Petitioner also must establish “that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016).

A POSA would have no motivation to modify Wentworth. As developed in section IV(B) above, Unirac's proposed motivations to modify Wentworth are based on problems that do not exist. Unirac bases its motivation to modify on its misbelief that the seal in Wentworth is "not held in place by the compressive force of the fastener," is "located external to the fastener," and is "uncovered and potentially exposed to the elements, and thus may deteriorate, degrade or loosen over time." *Petition*, p. 27.

All the foregoing statements made by Petitioner are verifiably false. Simple review of the Wentworth reference in its entirety and the Wentworths' brochure depicting installation, both of which are included in the file wrapper for the '777 Patent, turn Petitioner's alleged motivations on their head. *See*, EX-2003, p. 1; EX-1002, pp. 73-99.

The seal in Wentworth is covered by mounting hardware and compressed into the stanchion by the fastener. EX-2003, p.1; EX-1005 3:28-36. Excerpts of the brochure show the system in various levels detailed above, but the below cross section modified by Ecofasten illustrates the Wentworth system as reduced to practice more clearly.



Petitioner's alleged shortcomings in Wentworth are critical to its obviousness positions, but the shortcomings identified by Petitioner do not exist in the Wentworth system. The linchpin to Petitioner's entire obviousness analysis is that POSA would be motivated to solve the non-existent problems. The alleged motivation fails, and so too must Petitioner's obviousness position.

**v. Petitioner's proposed modifications of Wentworth would not leave a POSA with a reasonable expectation of success.**

A POSA would expect failure with Petitioner's proposed novel sealing assembly, as developed above. Combining Petitioner's redesigned seal attributed to Thaler with the sleeve of Wentworth would not result in compression in any direction when the assembly is installed on a roof in accordance with the actual teaching of Wentworth and its reduction to practice. EX-2001, ¶ 83. The modifications proposed by Petitioner would also result in pooling water above its

redesigned seal and leaking along the sealing washer internal to the stanchion. *Id.* Accordingly, a POSA would not expect success in making the proposed modifications.

Each of the foregoing shortcomings related to claim 1 are sufficient standing alone to invalidate Petitioner's obviousness position. Three of four *Graham* factors, the lack of motivation to modify the prior art, and POSA's expectation the proposed modifications would fail all support the non-obviousness of claim 1. Considered together, these shortcomings render Petitioner's obviousness claims destined to fail.

The above deficiencies described in context of claim 1 also apply to dependent claims 2-5. Accordingly, Petitioner is unlikely to succeed in invalidating claims 1-5.

**2. Unirac is unlikely to invalidate Claim 6 or any of its dependent claims because it has not established a *prima facie* case of obviousness for claim 6.**

Claim 6 patentably distinguishes over Wentworth, Glicksman, Thaler, and Ullman because Unirac has not established a *prima facie* case of obviousness over these references. Claims 7-9 depend on claim 6 and patentably distinguish over Wentworth, Glicksman, Thaler, and Ullman for the same reasons.

**i. Unirac's fails to establish the first *Graham* factor because the prior art references relied on do not disclose the "preformed rubber seal" or "L-shaped bracket" features of claim 1.**

The first *Graham* factor requires Petitioner to determine "the scope and content of the prior art." *Graham* 383 U.S. at 16. Neither the "*preformed rubber seal*" nor the "*bracket supportable on the flashing*" recited in claim 6 are disclosed in the prior art selected by Petitioner.

Claim 6 requires:

*a preformed rubber seal including a first end portion forming a first circular disk having a first planar end surface, a second end portion forming a second circular disk having a second planar end surface, and a central portion between the first end portion and the second end portion, the preformed rubber seal defining a cylindrical second aperture centrally located in the preformed rubber seal and extending from the first planar end surface to the second planar end surface (the claim element referred to as “[6b]”).* *Id.* at 34:17-25.

The claim elements [1b] and [6b] are substantially similar in the context of independent claims 1 and 6, respectively. The factors of the obviousness analysis for element [6b] are substantially similar to the analysis for [1b] and should also lead to a finding of non-obviousness. Petitioner adds the Ullman reference in challenging claim 6, but none of Wentworth, Thaler, Glicksman, or Ullman disclose the “*preformed rubber seal*” with the detailed elements required by claim 6.

Claim 6 also requires:

*a bracket supportable on the flashing, the bracket including a planar first end, a first arm, a second arm, and a planar second end, the planar first end defining a third aperture, the third aperture including a first aperture portion having a first cylindrical shape and defining a first diameter and a second aperture portion having a second cylindrical shape and defining a second diameter that is less than the first diameter, the bracket defining a bracket aperture bound by the planar first end, the first arm, the second arm, and the planar second end (the claim element referred to as “[6c]”).* *Id.* at 34:26-37.

Unirac fails to identify any prior art reference that discloses “*a bracket supportable on a flashing*” containing “*a planar first end. . . a first arm, a second arm and a second planar end*” as required by the express language of claim 6. Unirac misconstrues the stanchion of Wentworth as a bracket, and then uses the cross section of a module support rail in Ullman to modify the stanchion. *Petition*, p. 66. EX-1008, ¶¶0159-0160, Fig. 15- Fig. 18. Neither Wentworth nor Ullman disclose “*a bracket supportable on the flashing*” including “*a first aperture portion having a first cylindrical shape and defining a first diameter and a second aperture portion*

*having a second cylindrical shape and defining a second diameter that is less than the first diameter,”* which claim 6 requires.

Unirac argues that the stanchion of Wentworth should be modified by the cross section of a module support rail because the shape of the bracket is not critical. But the express language of claim 6 makes this feature and every other feature of claim 6 critical.

The “*bracket supportable on the flashing*” and “*preformed rubber seal*” of claim 6 are not disclosed in any of the Wentworth, Thaler, Glicksman, or Ullman references. Thus, these features are both beyond the scope and content of the prior art purposes of assessing the first Graham factor.

**ii. Unirac has not identified the differences between its selected prior art and claim 6, failing to establish the second *Graham* factor.**

The second *Graham* factor requires Petitioner to ascertain “the differences between the prior art and the claims at issue.” *Graham* 383 U.S. at 16.

Petitioner does not identify a single word from the “*preformed rubber seal*” element of claim 6 that is missing from Wentworth’s disclosure. Accordingly, Petitioner fails to establish the second *Graham* factor for claim 6.

Petitioner similarly does not identify a single word from the “*bracket supportable on the flashing*” element of claim 6. Petitioner simply states, “this limitation is taught by Wentworth, for the reasons discussed with respect to limitation [1c], with the exception of the shape of the bracket.” *Petition*, p. 65. Claim 6 does not recite “the shape of the bracket.” Instead, claim 6 recites:

*a bracket supportable on the flashing, the bracket including a planar first end, a first arm, a second arm, and a planar second end, the planar first end defining a third aperture, the third aperture including a first aperture portion having a first cylindrical shape and defining a first diameter and a second*



*aperture portion having a second cylindrical shape and defining a second diameter that is less than the first diameter, the bracket defining a bracket aperture bound by the planar first end, the first arm, the second arm, and the planar second end.*

Petitioner does not identify which claim language Wentworth fails to teach. Petitioner has not identified the differences between the prior art and claim 6, ignoring the second Graham factor.

**iii. The fourth *Graham* factor weighs in favor of non-obviousness due to commercial success of the claimed invention.**

The fourth Graham factor comprises secondary considerations such as commercial success. Ecofasten has substantial commercial success making and selling the claimed invention. Over the last six and a half years, Ecofasten has sold more than \$35 million worth of flashing for the roof mount system of claim 6, with more than 17 million flashing units sold. [cite Declaration] The fourth Graham factor favors non-obviousness of claim 6.

**iv. Petitioner’s stated motivation to modify the Wentworth reference contradicts the Wentworth reference and its reduction to practice.**

In addition to satisfying the Graham factors, Petitioner also must establish “that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016).

For the reasons developed in section IV(B) and further discussed in reference to claim 1 above, Petitioner’s proposed motivation to modify the Wentworth reference fails. Petitioner’s statements regarding problems in Wentworth are false. The alleged motivation fails, and so too must Petitioner’s obviousness position.

**v. Petitioner's proposed modifications of Wentworth would not give a POSA a reasonable expectation of success.**

A POSA would expect failure with Petitioner's proposed novel sealing assembly, as developed above and further discussed in relation to claim 1 above.

Each of the foregoing shortcomings related to claim 6 are sufficient standing alone to invalidate Petitioner's obviousness position. Three of four *Graham* factors, the lack of motivation to modify the prior art, and the expectation that the proposed modifications would fail all support the non-obviousness of claim 6. Considered together, these shortcomings make Petitioner's obviousness claims destined to fail.

The above deficiencies described in context of claim 6 also apply to dependent claims 7-9. Accordingly, Petitioner is unlikely to succeed in invalidating claims 6-9.

**3. Unirac is unlikely to invalidate Claim 10 or any of its dependent claims because it has not established a *prima facie* case of obviousness for claim 10.**

Claim 10 patentably distinguishes over Wentworth, Thaler, and Glicksman because Unirac has not established a *prima facie* case of obviousness over these references. Claims 11-14 depend on claim 10 and patentably distinguish over Wentworth, Glicksman, Thaler, and Ullman for the same reasons.

Petitioner's obviousness position for claim 10 is based on the same three references as Petitioner's obviousness position for claim 1. The positions fail for similar reasons with minor differences identified below.

Claim 10 requires:

*a rubber seal including a first end portion, a second end portion and a central portion between the first and second end portions, the rubber seal defining a cylindrical second aperture through the first end portion, the second end portion, and the central portion, the cylindrical second aperture being normal to a first outside surface of the first end portion and a second end surface of a*

*second end portion*(the claim element referred to as “[10b]”). EX-1001, 34:60-68.

Claim 10 also requires:

*a bracket including a body portion and a flange portion, the flange portion defining a third aperture sized to receive the rubber seal and the upwardly extending projection a washer including a polymeric portion and a rigid backing portion and defining a fourth aperture* (the claim element referred to as “[10c]”). *Id.* at 35:1-4.

None of the Wentworth, Thaler, and Glicksman references relied on by Petitioner disclose “*a rubber seal including a first end portion, a second end portion and a central portion between the first and second end portions . . . the cylindrical second aperture being normal to a first outside surface of the first end portion and a second end surface of a second end portion*” as required by the express language of claim 10.

Instead, Unirac relies on Thaler as discussed in detail with respect to element [1b]. For the same reasons that the seal claimed in element [1b] is outside the scope of the prior art, so is the seal claimed in element [10b].

Unirac also fails to identify a prior art reference that discloses “*a bracket including a body portion and a flange portion*” as required by the express language of claim 10. None of the Wentworth, Thaler, or Glicksman references relied on by Unirac include such a bracket. Instead, Unirac modified the stanchion of Wentworth as discussed in detail with respect to element [1c]. For the same reasons that the bracket claimed in element [1c] is outside the scope of the prior art, so too is the bracket claimed in element [10c].

The remaining assessment of the obviousness framework for elements [10b] and [10c] are substantially the same as with element [1b] and [1c] discussed above, respectively. Each of the foregoing shortcomings related to claim 10 are sufficient standing alone to invalidate

Petitioner's obviousness position. Considered together, these shortcomings make Petitioner's obviousness claims destined to fail.

The above deficiencies described in context of claim 10 also apply to dependent claims 11-14. Accordingly, Petitioner is unlikely to succeed in invalidating claims 10-14.

**4. Unirac is unlikely to invalidate Claim 16 or any of its dependent claims because it has not established a *prima facie* case of obviousness for claim 16.**

Claim 16 patentably distinguishes over Wentworth, Thaler, Glicksman, and Ullman because Unirac has not established a *prima facie* case of obviousness over these references. Claims 17-24 depend on claim 16 and patentably distinguish over Wentworth, Thaler, Glicksman, and Ullman for the same reasons.

Petitioner's obviousness position for claim 16 is based on the same four references as Petitioner's obviousness position for claim 6. The positions fail for similar reasons with minor differences identified below.

Claim 16 requires:

*a rubber seal including a first end portion, a second end portion and a central portion between the first and second end portions, the rubber seal defining a cylindrical second aperture through the first end portion, the second end portion, and the central portion (the claim element referred to as "[16b]").* *Id.* at 35:29-33.

Claim 16 also requires:

*a bracket supportable on the flashing, the bracket including a first end, a first arm, a second arm, and a second end, the first end defining a third aperture, the third aperture including a first aperture portion and defining a first diameter and a second aperture portion defining a second diameter that is less than the first diameter, the bracket defining a bracket aperture bound by the first end, the first arm, the second arm, and the second end (the claim element referred to as "[16c]").* *Id.* at 35,36:34-5.

Unirac fails to identify a prior art reference that discloses “*a rubber seal including a first end portion, a second end portion and a central portion between the first and second end portions*” as required by the express language of claim 16. Unirac also fails to identify prior art reference that discloses, “*a bracket supportable on the flashing, the bracket including a first end, a first arm, a second arm, and a second end*” as required by the express language of claim 16. None of the Wentworth, Thaler, Glicksman, or Ullman references include the seal and bracket required by claim 16.

For the same reasons that the seal claimed in element [1b] and [6b] and the bracket claimed in element [6c] are outside the scope of the prior art for purposes of assessing the first *Graham* factor, so too are the seal claimed in element [16b] and the bracket claimed in element [16c].

The remaining assessment of the obviousness framework for the seal of element [16b] and the bracket of element [16c] are substantially the same as with the seal of element [1b] and [6b] and the bracket of [6c] above. Each of the foregoing shortcomings related to claim 16 are sufficient standing alone to invalidate Petitioner’s obviousness position. Considered together, these shortcomings make Petitioner’s obviousness claims destined to fail.

The above deficiencies described in context of claim 16 also apply to dependent claims 17-24. Accordingly, Petitioner is unlikely to succeed in invalidating claims 16-24.

Petitioner has not offered feasible obviousness positions for any of the Challenged claims and lacks reasonable likelihood of invalidating any of the Challenged Claims. Accordingly, the Board must not institute inter partes review under 35 U.S.C. § 314(a).

**V. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION OF THE *INTER PARTES* REVIEW BECAUSE THE OFFICE HAS ALREADY CONSIDERED THE SUPERIOR ART AND THE OFFICE DID NOT ERR**

The Board should exercise its discretion under 35 U.S.C. § 325(d) to deny institution of *Inter Partes* Review. When assessing a Petition under § 325(d), “the Board uses the following two-part framework: (1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of the first part of the framework is satisfied, whether the Unirac has demonstrated that the Office erred in a manner material to the patentability of challenged claims.” *Advanced Bionics, LLC v. MED-EL Electromedizinische Greate GBMH*, No. IPR2019-01469, Paper no. 6, p. 8 (P.T.A.B. February 13, 2020).

The Board in *Advanced Bionics* also assigns the non-exclusive Becton-Dickson factors to one of the two prongs. Factors going to whether the Office considered substantially the same art or arguments include:

*(a) the similarities and material differences between the asserted art and the prior art involved during examination, (b) the cumulative nature of the asserted art and prior art evaluated during examination, . . . (d) the extent of the overlap between the arguments made during examination and the manner in which Unirac relies on the prior art or Patent Owner distinguishes the prior art. Id. at p. 9 (citing Becton, Dickinson & Co. v. B. Braun Melsungen AG, No. IPR2017-01586, Paper 8, p. 17-18 (P.T.A.B. December 12, 2018)).*

The Office considered substantially the same prior art and substantially the same arguments during prosecution of the ‘777 Patent as those now advanced by Unirac. The art and arguments presented by Unirac add nothing new from what was already known and considered by the Examiner during prosecution. Unirac also fails to establish the Office committed a

material error in large part because its invalidity position is based on its own drawing of a seal rather than disclosure of a suitable seal in a prior art reference.

**A. The Patent Office considered the same Wentworth and Ullman references relied on by Unirac during prosecution of the ‘777 Patent.**

The Board in *Advanced Bionics* noted “[p]reviously presented art includes art made of record by the Examiner, and art provided to the Office by an applicant, such as on an Information Disclosure Statement (IDS), in the prosecution history of the challenged patent.” *Id.* at pp. 7-8. *Becton, Dickson* factor (a) assesses the similarities between the asserted art and art cited during examination. *Id.* at p. 10. Here, the Examiner made the art of record in a notice of references cited and applicant cited the art back in an IDS. *See*, EX-1002, pp. 73-99. The art cited by the Examiner is identical to the art asserted by Unirac on its Petition.

The Wentworth and Ullman references cited by Unirac were considered by the Examiner that allowed the ‘777 Patent. *Id.* Unirac mischaracterizes Ecofasten’s Information Disclosure Practice as burying Wentworth and Ullman by ignoring the twelve (12) other patent applications to which the ‘777 Patent claims priority (together with the ‘777 Patent, the ‘777 Family). As between Ecofasten and the Office, the Office identified Wentworth first in a Notice of References Cited in the ‘777 Family. EX-2004. From that point on, Ecofasten was obligated to report the same references back to the Office to meet its obligations and to have the references cited on the face of the other patents in the ‘777 Patent Family.

Ecofasten has a long and prolific relationship with the Office. It has been filing and prosecuting patent applications over a period spanning two decades with numerous corporate and personnel changes. Ecofasten’s first interaction with the Office was filing U.S. Provisional Application No. 60/216,143 in July of 2000. The company’s name changed a handful of times in

the 20 years between 2000 and today. Staff came and went. Patent counsel cycled through. Esdec bought the Ecofasten in 2019. One constant over Ecofasten's twenty-year history before the Office is the examiner responsible for most of its cases, Beth Stephan ("Examiner Stephan").

Twelve applications have issued in the '777 Patent Family. Examiner Stephan led examination on behalf of the Office on all twelve applications. Her tenure as lead examiner in the '777 Family spans from the first application in the '777 Family filed in March of 2009 to the latest patent issued in March of 2020. Examiner Stephan is still examining the '777 Family today. Her tenure and familiarity with the '777 Family is both impressive and unusual, and her experience with Ecofasten's technologies and the solar racking industry extends far beyond the '777 Family.

Examiner Stephan is identified as the responsible examiner on 28 out of Ecofasten's 41 granted patents, representing a clear majority. Examiner Stephan's successful career at the Office saw her become a primary examiner during the pendency of the '777 Family. She knows the references cited by Ecofasten in the '777 Patent. Examiner Stephan knows the technology claimed in the '777 Patent. In attempting to paint EcoFasten's Information Disclosure Statements as deceitful, Unirac ignores the history of the '777 Family by describing prosecution of the '777 Patent as though it existed in a vacuum.

It was Examiner Stephan who first found and cited the Wentworth reference identified by Unirac. The earliest citation of Wentworth came in 2011 during prosecution of U.S. Patent Application No. 12/727,726, a parent application to the '777 Patent. Examiner Stephan also cited Wentworth to Ecofasten in four other related applications around the same time. In total, *Examiner Stephan considered Wentworth before Ecofasten disclosed the reference in the following five parent applications to the '777 Patent:*



- 1) Considered Wentworth on September 16, 2011 in U.S. Application No. 12/727,726;
- 2) Considered Wentworth on September 20, 2011 in U.S. Application No. 12/914,209;
- 3) Considered Wentworth on September 19, 2011 in U.S. Application No. 13/166,378;
- 4) Considered Wentworth on September 16, 2011 in U.S. Application No. 13/166,542;

and

- 5) Considered Wentworth on June 7, 2016 in U.S. Application No. 15/003,472.

Unirac buries the lead by mischaracterizing EcoFasten's information disclosure practices as burying Wentworth. Ecofasten did not cite Wentworth in the '777 Family until after Examiner Stephan identified Wentworth on behalf of the Office. EX-2005; see also, EX-2004. Once the Office identified Wentworth in parent applications, however, Ecofasten was compelled to cite the reference back to the Office in the '777 Patent and other related applications. In fact, citing Wentworth back to the Office was the only way Ecofasten could have the Wentworth reference identified on the face of the '777 Patent and seek to avoid the very challenge Unirac now brings before the Board.

What the Petitioner seems to remain misinformed about, is that Wentworth was considered in every application of the '777 Family. Furthermore, Ecofasten first cited Ullman to the Office back on September 16, 2011, during prosecution of U.S. Patent Application No. 13/166,542, to which the '777 Patent claims priority. EX-2006. Subsequently, Ecofasten then continued to cite Ullman to the Office in the '777 Family and the '777 Patent.

Examiner Stephan considered both Wentworth and Ullman in her Examination of the '777 Patent. Wentworth and Ullman are the same art relied on by Unirac. Ecofasten did not bury either reference as Unirac suggests. Instead, Ecofasten followed the typical operating procedure

of citing the Wentworth and Ullman references identified by the Office in Information Disclosure Statements of related applications.

**B. The Office considered substantially the same art in the ‘777 Patent and ‘777 Family as relied on by Unirac in the Glicksman and Thaler references.**

Unirac relies on Glicksman and Thaler in its alleged grounds for invalidity. Glicksman and Thaler were not disclosed as references in the ‘777 application or its family, but both references are duplicative of art considered by the Office during examination of the ‘777 Patent and the ‘777 Family.

**1. Glicksman is duplicative of the Bellam and Garska references relied on by Examiner Stephan in rejecting an application in the ‘777 Family on behalf of the Office.**

Unirac relies on Glicksman as disclosing a composite washer. *Petition*, p 25. In particular, Unirac relies on Glicksman as teaching “a washer including a polymeric portion and a rigid backing portion and defining a fourth aperture.” *Petition*, p. 43; EX-1001 34,35:56-12. The *Petition* notes Glicksman’s disclosure of “a metallic washer element 11” and “a resilient washer element 12.” *Petition*, p. 25.

Examiner Stephan, the responsible Examiner in the ‘777 Patent, cited U.S. Patent No. 4,348,846 to Bellam (“Bellam” and EX-2012) and U.S. Publ. No. 2004/0251707 to Garska (“Garska”) in U.S. Patent Application No. 15/003,472 (‘472 Application) as teaching a composite washer with two materials. The ‘777 Patent claims priority to the ‘472 Application and is bound to it in title and patent term by terminal disclaimer.

In rejecting claim 9 of the ‘472 Application, Examiner Stephan relied on Bellam as disclosing “a washer (92, see column 34, lines 22-27) between a portion of the fastener and the bracket (see Figs. 3 and 4), wherein the washer includes a first portion and a second metallic

portion (see column 3, lines 22-27 where the washer is described as a deformable material considered the first portion and a steel like material being the second portion and considered metallic).” EX-2007, p. 5. Examiner Stephan also relied on Bellam as disclosing “compressing the first polymeric portion of the washer against a surface of the bracket with the fastener (see column 3, lines 24-33, the deformable material produces an outward bulge which is considered made by compression of the first portion of the washer).” *Id.* Bellam itself states “[a] washer 92, or the like, is a deformable material backed by a steel like material.” EX-2012, 3:21-23. Examiner Stephan also cites a reference for the particular polymeric material for good measure, stating “Garska discloses a washer of a compressible polymeric material.” EX-2007, p. 5.

When Examiner Stephan rejected claim 9 of the ‘472 Application on June 7, 2016, the rejected claim recited “a washer between a portion of the fastener and the bracket, wherein the washer includes a first polymeric portion and a second metallic portion,” and “compressing the first polymeric portion of the washer against a surface of the bracket with the fastener to form a seal therebetween inhibiting fluid flow through the flashing.” Ecofasten did not argue with the Office on the basis of the composite washer. Instead, Ecofasten amended the flashing feature to overcome the rejection.

Unirac relies on Glicksman for features substantially the same as those found in Bellam and Garska and relied on by the Office in rejecting claim 9 of the ‘472 Application, a member of the ‘777 Family. Both were considered by the Office during prosecution of the ‘777 Patent. EX-1002 pp. 73-99. Glicksman is thus substantially the same art considered by the Office for purposes of the Petition.

**2. Thaler is duplicative of art and arguments considered by the Office during prosecution of the ‘777 Patent because Thaler, like the other art considered, does not disclose the seal recited in the challenged claims of the ‘777 Patent.**

Unirac’s selection of Thaler represents duplicative art and arguments. During prosecution of the ‘777 Patent, the Office considered many references that include seals that are loaded in compression, including, for example, Wentworth (EX-1005), Japanese Publication No. JP2003-336355 (EX-2009), German Publication No. DE 10 2005 018 687 (EX-2010), Japanese Publication No. JP1983-194642 (EX-2011), and U.S. Patent No. 4,321,745 (EX-1010) (the “Considered References”). At least the Considered References use the same loading scheme employed by the claims of the ‘777 Patent. Thaler is duplicative, because better prior art has already been considered by the Office.

As a practical matter, Thaler does not disclose the seal recited in the challenged claims of the ‘777 Patent. Thaler thus cannot be the source of a material error by the Office in light of the more relevant Considered References. Unirac has what seems to be unlimited resources to devote to this matter given this Petition requesting IPR, a second Petition requesting IPR against another Ecofasten application, two newly filed lawsuits in Delaware,<sup>5</sup> newly filed lawsuit in California,<sup>6</sup> and the lawsuit Ecofasten filed first in New Mexico.<sup>7</sup> Despite all its resources and strong desire to invalidate the ‘777 Patent, the best Unirac could come up with was a reference from outside

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<sup>5</sup> *Unirac, Inc. v. Ecofasten Solar, LLC et al*, 1:21-cv-00058-UNA (D. Del.); *Unirac, Inc. v. Ecofasten Solar, LLC et al*, 1:21-cv-00059-UNA (D. Del.)

<sup>6</sup> *Unirac, Inc. v. Wencon Development, Inc. d/b/a Quickmount PV Corporation and Esdec, Inc.*, 3:21-cv-00478 (N.D. Cal.)

<sup>7</sup> *Ecofasten Solar, LLC v. Unirac, Inc.*, 1:20-cv-01008 (D.N.M.)

the solar industry that fails to disclose the seal claimed in the ‘777 Patent. Unirac, like the Office, found only art that disclosed patentably distinct seals.

Ignoring the teachings of the prior art and the common sense of a POSA, Unirac draws a made-up seal and called it prior art. Unirac starts with the grommet from Thaler and uses hindsight to guide its hand as it eliminates key contours, changes the mode of sealing, and places the grommet from Thaler in an environment where it would be ineffective. Unirac then justifies the redraw as obvious without credible support. At the same time, Unirac tries to bolster its hand-made position with the meaningless and self-serving statement that Ecofasten gave no “criticality” to the seal in the ‘777 Patent. ***But the ‘777 Patent claims a seal with a particular structure.***<sup>8</sup>

Like Unirac, the Office considered a plethora of references that teach various seals. Like Thaler, none of those various seals from that plethora of references teaches the seal as claimed in the ‘777 Patent. The Office does not redraw a prior art reference to justify a rejection, because the Office is prohibited from applying hindsight bias. The Office is also limited by the scope and content of the prior art; hand-drawn references are not considered part of the prior art.

Neither Unirac nor the Office considered references disclose the seal recited in the Challenged Claims. Thus, the Office considered substantially the same art as the Thaler reference when it considered prior art seal structures that fail to disclose the seal claimed in the ‘777 Patent.

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<sup>8</sup> The Supreme Court has made is clear that criticality comes from the claimed structures by holding “[t]he claim ‘define[s] the scope of a patent grant.’” *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 373 (1996) (internal citations omitted).

In a similar vein, the Office considered substantially the same arguments now advanced by Unirac with regards to the seal from Thaler. Because the Office is limited to reliance on the scope and content of the prior art and prohibited from hindsight bias, it did not, and could not redraw a prior art reference to suit its needs.

**C. Unirac has not established that the Office erred in a manner material to patentability of the challenged claims.**

Unirac has failed to establish material error by the Office. The Petition does not mention examiner error until page 77 when it states, “by not considering Wentworth or Ullman, the Examiner made a material error under the second part of the test in Advanced Bionics.” *Petition*, p. 77. After alleging that failure to consider Wentworth and Ullman was error material to patentability, Unirac gives a cursory treatment of Becton Factors (c), (e), and (f) pointing back to its obviousness analysis. But the Office explicitly considered Wentworth and Ullman.

**1. The Office did not materially error by failing to consider Wentworth because the Office discovered Wentworth and repeatedly considered it during examining the ‘777 Family and the ‘777 Patent itself.**

The Office found Wentworth before Ecofasten even knew of its existence. Examiner Stephan identified Wentworth to Ecofasten in signed notice of references considered. EX-2004. Examiner Stephan also considered the same reference in examining the ‘777 Patent and several other related applications. *See*, EX-1002, pp. 73-99; *See also*, EX-2003.

The first of the non-exclusive Becton factors is “(c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection.” *Becton, Dickinson & Co.*, No. IPR2017-01586, *Paper* 8, p. 17 (P.T.A.B. December 12, 2018). It is true that Examiner did not issue a prior art rejection of the ‘777 Patent based on Wentworth or Ullman, but the lack of a prior art rejection is not error material to patentability *per se*.

The ‘777 Patent is directed to a particular seal having a particular shape and fit into a roofing mount assembly. Every claim in the ‘777 Patent claims variously require a particular seal shape that fits into a flashing and bracket of a roof mount assembly. For example, claim 10 identified as representative on page 8 of the Petition recites:

- 1. A roof mount assembly comprising:  
a flashing including a top surface, a bottom surface, and an upwardly extending projection with the flashing defining a first aperture extending through the upwardly extending projection between the top surface and the bottom surface;  
**a preformed rubber seal including a first end portion forming a first circular disk having a first planar end surface, a second end portion forming a second circular disk having a second planar end surface, and a central portion between the first end portion and the second end portion, the preformed rubber seal defining a cylindrical second aperture centrally located in the preformed rubber seal and extending from the first planar end surface to the second planar end surface;**  
an L-shaped bracket supportable on the flashing, the L-shaped bracket including an elongate body portion defining a third aperture and a flange defining a fourth aperture sized to receive the preformed rubber seal and the upwardly extending projection, the fourth aperture including a first aperture portion having a first cylindrical shape and defining a first diameter and a second aperture portion having a second cylindrical shape and defining a second diameter that is less than the first diameter;  
a washer including a polymeric compression portion and a rigid backing portion and defining a fifth aperture; and  
a screw including a head and extending through the first aperture, the cylindrical second aperture, the fourth aperture, and the fifth aperture, to secure the L-shaped bracket and the flashing and inhibit fluid flow through the first aperture.*

The features of challenged claim 1 bolded above are collectively referred to as “Sealing Features.” To summarize, the Sealing Features of claim 1 include a seal with two disks on the opposite ends of the seal, and an aperture with a tapered shape sized to receive both the seal and a protruding piece of flashing. The Sealing Features are novel parts of claim 1 in part because of the interplay between the seal, the protruding flashing, and the bracket that receives both the seal and flashing.

Given the novel Sealing Features of the challenged claims, it is no surprise the Office elected not to reject the challenged claims based on prior art. Ultimately, there is no reference that discloses the Sealing Features because they are novel and non-obvious.

**2. Unirac does not sufficiently point out the Examiner’s error in evaluating the prior art.**

The second non-exclusive Becton factor is “(e) whether Unirac has pointed out sufficiently how the Examiner has erred in its evaluation of the asserted prior art.” Unirac alleges only that “by not considering Wentworth or Ullman, the Examiner made a material error under the second part of the test in *Advanced Bionics*.” *Petition*, p. 77.

As described above, the Examiner did consider Wentworth and Ullman. The Office considered the exact Wentworth and Ullman references that Unirac relies on in several applications in the ‘777 Family. *See*, EX-1002, pp. 73-99; *See also*, EX-2003. In fact, the Wentworth and Ullman references were first discovered by the Office then cited back to the Office by Ecofasten.

Unirac never points out any other error explicitly. Unirac does not explicitly assert that the Examiner erred by not to consider Glicksman and Thaler. Unirac thus failed to sufficiently point out the Examiner’s material error.

To the extent the Board finds that the Unirac’s obviousness allegations implicitly suggest such error, the obviousness allegations are insufficient and immaterial to patentability. As described above, the Examiner cited Bellam and Garska for teachings equivalent to Glicksman and issued a rejection based on same in the ‘472 Application. Failure to cite Glicksman in a rejection was not material error because the Examiner cited other references with duplicative disclosures.



The real problem for Unirac is that each of the challenged claims require the Sealing Features (i.e., a particular arrangement of a seal, flashing, and bracket interplaying to seal a roof mount). During examination, the Office did not cite any references that taught the Sealing Features from the challenged claims. Unirac's invalidity search did not identify any references that teach the Sealing Features recited in the challenged claims, as no references identified in the Petition disclose the seal arrangement of the challenged claims.

So instead of identifying prior art, Unirac started from the roof vent grommet in Thaler, drew a completely new seal of its own, and put it into the stanchion of Wentworth. The Office cannot have erred by failing to invent a prior art seal as Unirac has done inspired by hindsight and the disclosure of the '777 Family. Thus, any implication that Office materially erred by failing to consider the Thaler reference is insufficient.

**3. The Petition presents no additional facts or evidence that warrant reconsideration of the prior art identified in the Petition.**

The third non-exclusive Becton factor is, “(f) the extent to which additional evidence and facts presented in the petition warrant reconsideration of the prior art or arguments.”

**i. The Examiner's statement regarding criticality does not warrant reconsideration of Unirac's identified prior art because the Examiner's statement is irrelevant to this proceeding and Unirac mischaracterizes the statement.**

Unirac tries to avail itself of an Examiner's statement during prosecution that “Applicant's disclosure lends no criticality to the specific seal and washer material and fasteners used.” EX-1002, p. 47. Again, Unirac is selectively presenting text out of context. This time, by omitting context, Unirac changes the meaning of the Examiner's statement and falsely accuses Ecofasten of inaction.

As a preliminary matter, Unirac's allegation is meaningless for purposes of its obviousness positions. The claims define the metes and bounds of the property rights in a patent. *Markman*, 517 U.S. at 373 (1996) (internal citations omitted). Alleging criticality of features in a specification is looked on as a bad prosecution practice. Third-parties challenging patents containing such statements often try to incorporate disclosure into the claims based on such statements. In any event, the Examiner made this statement on the record during prosecution. Examiner Stephan's statement is previously considered evidence that does not warrant reconsideration.

Unirac cites no reason criticality should matter in this Petition. Criticality is relevant to genus/species distinctions according to the Federal Circuit. See *Atofina v. Great Lakes Chem. Corp.*, 441 F.3d 991 (Fed. Cir. 2006). In *Atofina*, the court was assessing whether disclosure of a genus anticipated claims directed to a species where the disclosure afforded no criticality to a range. The MPEP §2144.02 also discusses criticality of a claim element as a way to distinguish applications with similar facts to existing court decisions. Neither of these conditions exist in this case. Criticality has no bearing on the obviousness positions taken by Unirac.

In examining the '777 Patent, Examiner Stephan was referring to the specific *material* used in the claimed seal and washer, as well as specific fasteners, when she made the statement that "Applicant's disclosure lends no criticality to the specific seal and washer *material* and fasteners used." She was also issuing an obviousness-type double patenting rejection. Examiner Stephan was addressing a genus/species type of distinction similar to *Atofina*. The claims at issue in the '777 Patent particularly recited a rubber seal, while the claims in the granted parent application cited in the rejection do not mention rubber for the seal or polymeric for the washer. EX-2008, 20, 24:7-49. EX-1002, p. 47. While the Examiner's application of criticality may have

been imperfect, her statement quickly becomes benign once the missing term “material” enters the discussion.

Unirac’s statement regarding criticality is false on two fronts. First, Unirac wrongly accuses Ecofasten of not pushing back on the Examiner. Setting aside that most patent practitioners again consider it bad practice to engage the Examiner in an adversarial manner on matters rendered moot by subsequent amendments, Ecofasten explicitly disavowed all the Examiner’s assertions during prosecution. EX 1002, p. 4. Ecofasten regularly disavows the Examiner’s positions in a Statement on Reasons for Allowance to avoid the very accusations Unirac now makes. EcoFasten’s statement reads:

Applicant takes no position regarding the reasons for allowance presented by the Examiner other than the positions Applicant may have previously taken during prosecution. Therefore, the Examiner’s reasons for allowance should not be attributed to Applicant as an indication of the basis for Applicant’s belief that the claims are patentably distinct. Furthermore, it is respectfully asserted that there may also be additional reasons for patentability of the claimed subject matter not explicitly stated in this record and Applicant does not waive its right to such arguments by not further addressing such reasons herein. *Id.*

The above statement is in the same file wrapper cited by Unirac in support of its unfounded and irrelevant accusations. *Id.*

Unirac’s statement is also false because it mischaracterizes the Examiner’s assessment. Unirac states ‘the Examiner during original prosecution recognized that ‘Applicant’s disclosure lends no criticality’ to the configuration of most of these elements.” *Petition*, p. 1. Unirac quotes the Examiner as stating, “Applicant’s disclosure lends no criticality to the specific seal...used.” The ellipsis deletes content modifying the terms seal and washer. *Petition*, p. 38. Examiner Stephan actually stated, “Applicant’s disclosure lends no criticality to the specific seal and washer *material* and fasteners used.” EX-1002, p. 47. The sentence before further clarifies the

parent application “8,151,522 lacks the specific seal and washer material, and bracket and fasteners used.” *Id.*

Examiner Stephan never states the particular configuration of most elements claimed in the ‘777 Patent are not critical. She never states the disclosure lends no criticality to the specific seal used. Instead, Examiner Stephan focused on a particular seal material in issuing an obviousness-type double patenting rejection.

**ii. Mr. Dregger’s declaration does not warrant reconsideration of the prior art identified in the Petition because the Office already considered similar analysis by Mr. Dregger during prosecution of the ‘777 Patent and his declaration fails to establish obviousness.**

Unirac offers a Declaration of Philip Dregger as evidence supporting its obviousness positions. In substance Mr. Dregger’s declaration is a carbon copy of Unirac’s obviousness positions. The art and arguments from Unirac’s obviousness positions fall flat for all the reasons identified herein. Namely, Wentworth and Ullman were considered by the Office; Glicksman is duplicative prior art; Thaler does not disclose the features Unirac relies on it as disclosing; and the Office did not commit material error. Mr. Dregger’s report offers no substance warranting reconsideration of the prior art. Instead, Mr. Dregger’s opines that a hand-drawn seal crafted using hindsight for purposes of invalidating the challenged claims would be obvious. EX-1003, pp. 45-46.

The Petition offers nothing of note in requesting *inter partes* review. Unirac offers insufficient invalidity contentions, cites a rehashed declaration by a previously considered expert, misrepresents a statement made by the Examiner during prosecution, and falsely accuses Ecofasten of adopting the misrepresented statement. None of this evidence, none of the

references relied on, and nothing else Unirac can conjure merits reconsideration of the prior art identified in the Petition.

## **VI. CONCLUSION**

The Petition fails to demonstrate a reasonable likelihood that the Unirac will prevail as to any of the challenged claims. The Petition also rehashes substantially the same art and arguments previously considered without establishing the Office erred. The Board should therefore deny institution of *Inter partes* review of the '777 Patent.

Respectfully submitted,  
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Dated: 2 June 2021

## **ATTACHMENT A: PROOF OF SERVICE OF THE RESPONSE**

The undersigned certifies service pursuant to 37 C.F.R. §§ 42.6(e) and 42.105(b) on Unirac, Inc. by Express Mail and email a copy of this Preliminary Response to Petition for *Inter Partes* Review and supporting materials at the correspondence addresses of record for the Unirac:

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## **CERTIFICATE OF COMPLIANCE**

Pursuant to 37 C.F.R. § 42.24 *et seq.*, the undersigned certifies that this document complies with the type-volume limitation. This document contains 13,911 words as calculated by the “Word Count” feature of Microsoft Word 365, the word processing program used to create it.

Dated: June 2, 2021

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