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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* TOBIAS HERR, GEORGIOS MARGARITIS, and  
JOERG WELKE

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Appeal 2017-005927  
Application 13/370,069  
Technology Center 2800

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Before BRADLEY R. GARRIS, BEVERLY A. FRANKLIN,  
and MICHAEL G. McMANUS, *Administrative Patent Judges*.

McMANUS, *Administrative Patent Judge*.

DECISION ON APPEAL

The Examiner finally rejected claims 1–28 of Application 13/370,069 under 35 U.S.C. § 103(a) as obvious. Final Act. (May 4, 2016) 2–16. Appellants<sup>1</sup> seek reversal of the rejections of claims 1–19 and 21–28<sup>2</sup> pursuant to 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6.

For the reasons set forth below, we AFFIRM.

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<sup>1</sup> ROBERT BOSCH GmbH is identified as the real party in interest. Appeal Br. 1.

<sup>2</sup> Appellants do not seek review of claim 20 which was canceled by amendment dated December 8, 2014. Appeal Br. 1.

## BACKGROUND

The present application generally relates a handheld tool carrying case that includes an illuminating device. Spec. 1. The illuminating device is described as having at least one cooling element which includes one or more “cooling ribs” displaced from the illuminating arrangement and exposed to an external environment. *Id.* at 10; Fig. 1.

Claim 1 is representative of the pending claims and is reproduced below:

1. A handheld tool carrying case, comprising:
  - an illuminating device, which has at least one illumination arrangement that provides illumination along an illumination direction;
  - wherein the illuminating device has at least one cooling element for cooling the illumination arrangement, wherein:
    - the at least one cooling element includes an opening into which the illuminating arrangement is inserted,
    - the at least one cooling element includes a plurality of cooling ribs displaced from the illuminating arrangement and exposed in an uncovered state to an external environment, and
    - the uncovered cooling ribs extend toward the external environment in the illumination direction.

Appeal Br. (Claims App. 1).

## REJECTIONS

On appeal, the Examiner maintains the following rejections:

1. Claims 1–5, 7–19, and 21–28<sup>3</sup> are rejected under 35 U.S.C. § 103(a) as obvious over Zampini<sup>4</sup> in view of Chen<sup>5</sup> and further in view of Chou<sup>6</sup>. Final Act. 2–15.
2. Claim 6 is rejected under 35 U.S.C. § 103(a) as obvious over Zampini in view of Chen and further in view of Gilmore<sup>7</sup>. *Id.* at 15–16.
3. Canceled claim 20 is said to be rejected under 35 U.S.C. § 103(a) as obvious over Zampini in view of Chen and further in view of Kelly<sup>8</sup>. *Id.* at 16.

## DISCUSSION

**Rejection 1.** The Examiner rejected claims 1–5, 7–19, and 21–28 as obvious over Zampini in view of Chen and further in view of Chou. *Id.* at 2–15. In support of such rejection, the Examiner found that Zampini teaches a plurality of cooling ribs displaced from the illuminating arrangement extending toward the external environment. *Id.* at 3. The Examiner further

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<sup>3</sup> This rejection is initially indicated as applicable only to claims 1–5, 7–19, and 21. Final Act. 3. The rejection, however, specifically addresses claims 22–28 as well. *Id.* at 11–15.

<sup>4</sup> US 7,766,511 B2, issued Aug. 3, 2010.

<sup>5</sup> US 2004/0228114 A1, published Nov. 18, 2004.

<sup>6</sup> US 2006/0098441 A1, published May 11, 2006.

<sup>7</sup> US 5,685,421, issued Nov. 11, 1997.

<sup>8</sup> US 4,460,947, issued July 17, 1984.

found that Chou teaches cooling ribs exposed in an uncovered state to an external environment. *Id.* at 4. Appellants argue that the rejection is in error on several bases.

*The references' teaching of "ribs . . . exposed in an uncovered state to an external environment" and "extend . . . in the illumination direction"*

First, Appellants argue that Chou does not teach ribs exposed to an external environment and extending in the illumination direction. Appeal Br. 3. Appellants argue that the backlight module of Chou teaches fins that extend in a direction *opposite* the illumination direction. *Id.* Appellants further argue that the fins of Chou extend into the interior of an LCD housing unit and are therefore not "exposed . . . to an external environment." *Id.*

The Examiner responds that the rejection relies upon Zampini, not Chou, as teaching fins which extend toward the illumination direction. Answer 3. The Examiner additionally finds that Figure 2 of Zampini teaches a configuration where the skin does not extend across the entire surface, thereby leaving certain parts of the core (equivalent to the "fins" of the claim) exposed to the environment. *Id.* The Examiner additionally finds that Chou depicts fins not enclosed by any structure. *Id.* at 4. The Examiner determines that Appellants' argument that the fins of Chou's backlight module must necessarily be enclosed is unsupported. *Id.* The Examiner further determines that the "external environment" of the claim refers to air external to the ribs. *Id.*

We concur with the Examiner's determination that Appellants' argument that Chou does not teach ribs exposed to an external environment

because the subject backlight module will be installed in a larger structure is unsupported. Appellants' assertion that "these fins 35 are covered by the LCD housing in which the backlight module of which fins are part is installed" (Appeal Br. 3) is merely attorney argument. *See In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness."); *Gemtron Corp. v. Saint-Gobain Corp.*, 572 F.3d 1371, 1380 (Fed. Cir. 2009) ("[U]nsworn attorney argument . . . is not evidence and cannot rebut . . . other admitted evidence . . ."). Even were this assertion supported, it would not be dispositive of whether the cooling ribs of Chou are exposed to an external environment.

The Examiner determined that the "external environment" of the claim is air that circulates around the lighting unit. Answer 4. During examination, claim terms must be given their broadest reasonable construction consistent with the Specification. *In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007). An applicant seeking a narrower construction must either show why the broader construction is unreasonable or amend the claim to expressly state the scope intended. *In re Morris*, 127 F.3d 1048, 1057 (Fed. Cir. 1997).

Claim 1 requires "cooling ribs . . . exposed in an uncovered state to an external environment." The Specification does not use the term "external environment." It does provide that "[a] 'cooling element' should be understood particularly to be provided to carry off heat from the illumination arrangement, and to release it to the surrounding air." Spec. 2. Although not dispositive, this tends to support the Examiner's determination that the

“external environment” of the claim refers to air that surrounds the illumination arrangement and need not be external to the tool carrying case.

Moreover, Zampini explicitly teaches that “[f]or high powered applications, additional heat sinks may be added on the rear of the LEDs 19 **on the upper skin layer 15** or lower skin layer 13.” Zampini 9:67–10:2 (emphasis added).

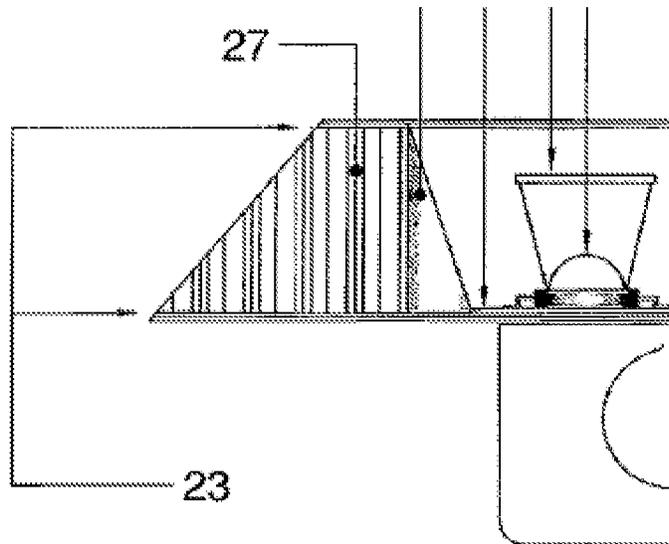
Accordingly, Appellants have not shown that the rejection is in error in finding that the cited references teach fins which extend toward the illumination direction and ribs exposed to an external environment.

#### *Aesthetic and Safety Considerations*

For their second argument, Appellants argue that a person of ordinary skill in the art would not have been motivated to expose the core 27 of Zampini. Appellants argue that such exposure would be aesthetically unappealing and may be unsafe as “a person could cut himself against the thin metal walls of core 27 were he to inadvertently brush up against it.” Appeal Br. 4.

The Examiner finds that a person of ordinary skill in the art would have been taught that the core may be exposed by Zampini’s teaching that “the outside edges of core 27 can also be cut as needed, for example, figure

2 shows the edge cut an at [sic] angle.” Answer 5 (citing Zampini 7:4–5).  
Figure 2 of Zampini is depicted, in part, below:



Zampini, Figure 2 is a simplified schematic side view of an LED light fixture mounted to a four gang electrical box. Zampini 4:10–11. The Examiner regards this as a direct teaching of an exposed core.

The Examiner further determines that Appellants’ characterization of the core 27 of Zampini as sharp enough to cut an individual is unsupported. Answer 6. The Examiner additionally regards Appellants’ argument that the hypothetical combination is aesthetically unpleasing as subjective and lacking force. *Id.*

We concur with the Examiner’s determination that Appellants’ argument regarding the core of Zampini being a safety hazard is unsupported. There is no evidence of record cited in support of this supposition. As above, unsworn attorney argument is not evidence. *Gemtron Corp.*, 572 F.3d at 1380. Nor is Appellants’ argument regarding the aesthetics of the exposed core of Zampini persuasive. “[C]ase law does not require that a particular combination must be the preferred, or the most

desirable, combination described in the prior art in order to provide [the] motivation [or reason] for the current invention.” *In re Fulton*, 391 F.3d 1195, 1200 (Fed. Cir. 2004). Such argument is additionally contrary to Zampini’s teaching that additional heat sinks (such as core 27) may be added to the top of the upper skin layer 15. Zampini 9:67–10:2.

*The Examiner’s Reliance on “Common Sense”*

For their third argument, Appellants contend that the Examiner improperly seeks to rely on common sense as an alternative rationale to justify the proposed combination. Appeal Br. 4–6. Appellants point to the following portion of the Final Rejection:

Examiner considers the exposure of cooling structures such as heat sink to outside air to be within the ordinary skill in the art as one would generally recognize that such a heat sink provides cooling by thermal diffusion with external air . . . and insulating such a cooling rib structure from outside air or any other thermal body would defeat the purpose and utility of having cooling ribs.”

Appeal Br. 4 (citing Final Act. 17). Appellants assert that this differs from the stated rejection which relies upon Chou as teaching exposed ribs. *Id.* at 5. In Appellants’ view, the foregoing is an alternative rationale which implicitly relies upon common sense rather than a specific teaching of the prior art. *Id.* Appellants argue that such reliance is improper as common sense is typically invoked to provide a reason to combine rather than to supply a missing limitation. *Id.* at 5–6.

Appellants further argue that the Examiner’s finding cited above is substantively flawed. *Id.* at 6. Appellants contend that the Examiner does not weigh the aesthetic impact of exposure of the core against the increased

cooling that would result. *Id.* Appellants point out that the Examiner makes no findings regarding the amount of heat that would dissipate through the skin 15 of Zampini and the degree to which such dissipation would be improved by removal of the skin. *Id.* Accordingly, in Appellants' view, the Examiner's finding that a person of ordinary skill would have been motivated by basic principles and common sense to remove the skin 15 of Zampini is merely speculative. *Id.*

The Examiner contends that the passage at issue regards the reason to *combine* Chou and Zampini, rather than being an independent basis for modification of Zampini. Answer 6. The Examiner further determines that Appellants' argument is predicated on Chou teaching fins that are not exposed to an external environment. *Id.* at 7. As above, Appellants have not shown error in the Examiner's finding that Chou teaches exposed fins. Finally, in regard to one's motivation to modify Zampini so as to have exposed cooling ribs, the Examiner determines that an improvement to the heat dissipation capability of Zampini, even if small, is still desirable. *Id.* at 7. Appellants have shown no error in the Examiner's determinations in this regard. "[A] given course of action often has simultaneous advantages and disadvantages, and this does not necessarily obviate motivation to combine." *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1165 (Fed. Cir. 2006).

Moreover, the foregoing is substantially moot as Appellants have failed to show error in the Examiner's stated basis for rejection that Chou teaches exposed ribs.

*Reason to Combine the Teachings of Zampini and Chen*

For their fourth argument, Appellants contend that there is no reason to combine the teachings of Zampini (light fixture) with Chen (illuminated toolbox). Appeal Br. 6–7. Appellants acknowledge that Chen teaches a toolbox with an illumination feature. *Id.* at 7. They argue, however, that one would not be led to modify such toolbox according to Zampini as such a modification presupposes compatibility between a light fixture intended for a stationary environment and a portable toolbox. *Id.*; Reply 9.

The Examiner responds that the preamble’s statement of a “handheld tool carrying case” is merely a recitation of the intended use of the claimed structure. Answer 7. Moreover, such preamble does not include any structural limitation. As a result, the Examiner contends, the preamble is entitled to no weight. *Id.* at 8. The Examiner further indicates that Chen was cited in the rejection merely to “facilitate prosecution.” *Id.*

As above, Chen teaches a toolbox with an external light. This provides an explicit teaching that a light unit may be combined with a toolbox. Final Act. 3. The Examiner makes a determination that it would have been obvious to use the lighting unit of Zampini with a toolbox as taught by Chen. *Id.* In order to rebut the Examiner’s finding, Appellants would have to show that one of skill in the art would have regarded Zampini as somehow incompatible with use in a portable toolbox environment. Appellants have not done so. Indeed, Zampini teaches that “[b]ecause of the versatile nature of the present invention, many techniques known in the art can be applied to the present invention so that it can be used *in any environment.*” *Id.* 10:16–18 (emphasis added).

Further, “it is not necessary that [the references] be physically combinable to render obvious the [patent].” *In re Sneed*, 710 F.2d 1544, 1550 (Fed. Cir. 1983); *see also In re Etter*, 756 F.2d 852, 859 (Fed. Cir. 1985) (en banc) (“*Etter's* assertions that Azure cannot be incorporated in Ambrosio are basically irrelevant, the criterion being not whether the references could be physically combined but whether the claimed inventions are rendered obvious by the teachings of the prior art as a whole.”).

Accordingly, Appellants have not shown error in the Examiner’s combination of the teachings of Chen and Zampini.

#### *Claim 16*

Claim 16 depends from claim 1 and further requires “wherein the illuminating device includes a holder configured to attach to the illumination arrangement, the holder being attached to the cooling element, wherein the holder and the cooling element enclose and extend beyond an illumination area of the illumination arrangement in an illuminating direction and are adapted to protect the illumination area.” Appeal Br. (Claims App. 2).

In the rejection, the Examiner cites to flange 35 depicted in Figure 2 of Zampini as satisfying the “holder” limitation. Final Act. 7–8.

Appellants’ argue that flange 35 is below the LEDs and, thus, does not extend beyond than illumination area “in an illuminating direction.” Appeal Br. 7. In this regard, we adopt the Examiner’s determination as set forth in the Final Rejection and the Answer. *See* Final Act. 7–8; Answer 8. In addition, we determine that Zampini teaches an embodiment where “the flange may be reversed for flush mounting.” Zampini 7:19–21, Fig. 13 (flange 50). As this embodiment teaches a flange above the level of the

LEDs, Appellants' argument is inapplicable. Accordingly, Appellants have failed to show error in regard to claim 16.

**Rejection 2.** The Examiner rejected claim 6 as obvious over Zampini in view of Chen and further in view of Gilmore. Final Act. 15–16. In challenging the rejection of claim 6, Appellants rely upon the same arguments presented in regard to the foregoing claims. Appeal Br. 8. As the foregoing arguments have not been found to demonstrate error in regard to the rejection of claims 1–5, 7–19, and 21–28, we are constrained to affirm the rejection of claim 6.

**Rejection 3.** The Examiner rejected claim 20 as obvious over Zampini in view of Chen and further in view of Kelly. Final Act. 16. Claim 20, however, was canceled by amendment dated December 8, 2014. Moreover, Appellants do not appeal the rejection of claim 20. Accordingly, we need not address such rejection.

#### CONCLUSION

The rejection of claims 1–5, 7–19, and 21–28 as obvious over Zampini in view of Chen and further in view of Chou is affirmed. The rejection of claim 6 as obvious over Zampini in view of Chen and further in view of Gilmore is affirmed. The rejection of claim 20 as obvious over Zampini in view of Chen and further in view of Kelly is moot.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED