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CARLSON, GASKEY & OLDS, P.C./Ford 400 W. MAPLE RD. SUITE 350 BIRMINGHAM, MI 48009			ROE, CLAIRE LOUISE	
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* STEVE F. CHORIAN, STEVE DROSTE,  
and JESUS CARDOSO

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Appeal 2019-000572  
Application 14/509,430  
Technology Center 1700

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Before ROMULO H. DELMENDO, JAMES C. HOUSEL, and  
MERRELL C. CASHION, JR., *Administrative Patent Judges*.

DELMENDO, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), the Appellant<sup>1</sup> appeals from the Primary Examiner's final decision to reject claims 1, 3–7, 10, 11, and 21–23.<sup>2</sup> We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42 and as listed in the Application Data Sheet filed October 8, 2014—namely, Ford Global Technologies, LLC, which is also identified as the real party in interest (Appeal Brief filed July 9, 2018 (“Appeal Br.”) at 1).

<sup>2</sup> *See* Appeal Br. 3–8; Reply Brief filed October 29, 2018 (“Reply Br.”) at 1–4; Final Office Action entered May 1, 2018 (“Final Act.”) at 2–10.

## I. BACKGROUND

The subject matter on appeal relates to a battery module which may be used in electric vehicles such as hybrid electric vehicles (HEVs) (Specification filed October 8, 2014 (“Spec.”) ¶¶ 1–2). Representative claim 1 is reproduced from the Claims Appendix to the Appeal Brief, as follows:

1. A battery module, comprising:  
a housing having *first and second vertical end walls extending vertically upward from a base, wherein the first and second end walls are connected together by first and second side walls extending upward from the base, wherein the base, end walls, and side walls are integrally formed as a single structural piece*, and wherein each of the first and second end walls includes electrical connections.

(Appeal Br. 9 (emphasis added)).

## II. REJECTIONS ON APPEAL

Claims 1, 3–7, 10, 11, and 21–23 stand rejected under 35 U.S.C. § 103 as unpatentable over Asai et al.<sup>3</sup> (“Asai”) in view of Tudron.<sup>4</sup>

## III. DISCUSSION

Except for claim 3 and claims 4 and 23 as a group, the Appellant’s arguments focus only on independent claim 1 (Appeal Br. 4–8).<sup>5</sup> Accordingly, we confine our discussion to representative claims 1, 3, and 4,

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<sup>3</sup> US 2011/0206948 A1, published August 25, 2011.

<sup>4</sup> US 2002/0076580 A1, published June 20, 2002.

<sup>5</sup> The Appellant points out an additional limitation in dependent claim 3 relative to claim 1 (*id.* at 6). As stated in 37 C.F.R. § 41.37(c)(1)(iv), however, merely pointing out what a claim recites does not constitute an argument in support of separate patentability. Therefore, we decline to consider claim 3 separately.

with all other claims on appeal standing or falling with claim 1, 3, or 4. *See* 37 C.F.R. § 41.37(c)(1)(iv).

1. *Claim 1*

As the Appellant points out (Appeal Br. 3), a central issue in this appeal is whether the Examiner’s finding that Asai discloses the “base” limitations highlighted above in reproduced claim 1 is based on a strained claim interpretation beyond the broadest reasonable interpretation consistent with the Specification. According to the Appellant, Asai does not disclose the “base” limitations recited in claim 1, as properly construed, because a person having ordinary skill in the art would not have considered Asai’s top cover to be a “base” (*id.* at 4–5). The Appellant urges that the Examiner’s position is inconsistent with Asai’s teachings, which describe a configuration that is inverted or opposite to what is recited in claim 1 (*id.* at 5).

For the reasons stated in the Examiner’s Answer, Final Office Action, and below, the Appellant’s arguments fail to identify reversible error in the Examiner’s finding underlying the rejection. *In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011).

Asai describes a power source apparatus for a motor that drives an automobile, such as a hybrid car or electric vehicle, wherein the apparatus is provided with battery blocks made up of a plurality of battery cells and an outer case that holds the battery blocks (Asai ¶¶ 2, 8). An embodiment of such an apparatus is illustrated in an annotated, inverted version of Asai’s Figure 6, which we reproduce from the Final Office Action (Final Act. 8), as follows:



structural piece constituting the case **75** is a plate labeled by the Examiner as “base” (*id.* at Fig. 6).

Thus, we find no structural difference between the “housing” including a “base” as defined in claim 1 and Asai’s box-shaped battery block case **75** as shown in Figure 6 above.<sup>6</sup> Although Asai’s power source apparatus as shown in Figure 6 is oriented with cooling plate **7** situated at the bottom of the apparatus relative to the ground, the Appellant does not direct us to persuasive evidence or technical reasoning establishing that Asai’s power source apparatus, in use, *could not* be disposed in an inverted orientation, if desired. Indeed, Asai does not place any such limitation as to possible configuration or orientation relative to the ground (*id.* ¶ 45 (“The car power source apparatus of the present invention is used as a power source installed on-board a vehicle.”). *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997) (“Schreiber’s contention that his structure will be used to dispense popcorn does not have patentable weight if the structure is already known, regardless of whether it has ever been used in any way in connection with popcorn.”); *In re Pearson*, 494 F.2d 1399, 1403 (CCPA 1974) (“We do not mean to imply that terms which recite the intended use or a property of a composition can never be used to distinguish a new from an old composition. However . . . such terms must define, indirectly at least, some characteristic not found in the old composition.”).

The Appellant argues that if flipped upside down, (i) Asai’s cooling plate **7** would be tasked with suspending a “relatively heavy” battery stack **10**, (ii) the cooling plate **7**’s ability to take advantage of gravity would be

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<sup>6</sup> *In re Fracalossi*, 681 F.2d 792, 794 (CCPA 1982) (anticipation is the epitome of obviousness).

removed when supporting the battery stack **10**, and (iii) the load on the cooling plate **7** would be increased (Appeal Br. 6). According to the Appellant, Asai states that the case **75** is not even required and that it does not bear any load (*id.*). These arguments, however, are not based on any facts but, rather, mere conjecture. Even if the battery stack **10** were assumed to be “relatively heavy” as argued, the Appellant does not provide any facts or reasoning establishing that cooling plate **7**, in concert with the case **75**, could not bear the load imparted by the battery stack **10** and gravity. *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.”).

The Appellant argues that “[the] Examiner admits that Asai lacks the claimed electrical connections” (Appeal Br. 6). To the extent this argument applies to claim 1, it is incorrect because the Examiner finds that Asai teaches such electrical connections (Ans. 4; Final Act. 3).

For these reasons, we uphold the Examiner’s rejection as maintained against claim 1.

2. *Claim 3*

Claim 3, which depends from claim 1, recites: “wherein each of the first and second end walls includes a positive electrical terminal and a negative electrical terminal” (Appeal Br. 9 (Claims App.)).

The Examiner finds that Asai teaches connecting a plurality of battery modules to each other (Ans. 5). That finding has not been shown to be erroneous. Indeed, Asai teaches that “[b]attery blocks **50** are daisy-chained together in series connection via cables connected to the connectors **51**”

(Asai ¶ 50). A person having ordinary skill in the art would have drawn a reasonable inference from this disclosure that the one connection at an end wall of Asai's case **75** would be a positive terminal and the other connection at the other end wall would be a negative terminal. *In re Preda*, 401 F.2d 825, 826 (CCPA 1968) (“[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.”).

Moreover, as the Examiner finds, “Tudron teaches the concept of a battery having both positive and negative electrical connections of the two opposing end walls of the battery (paragraphs 17-21) in order to easily have a design choice to daisy-chain multiple batteries in series or parallel without having to flip the battery” (Ans. 5). That Tudron's batteries lack a housing does not negate the concept that a positive terminal on the rear face of each battery must be electrically connected with a negative terminal on the front face of an adjacent battery to facilitate a stack or daisy-chain arrangement of plural batteries (Tudron ¶ 17).

For these reasons, we uphold the rejection as maintained against claim 3.

3. *Claim 4*

Claim 4, which depends from claim 3, recites: “further comprising a plurality of battery cells provided within the module” (Appeal Br. 9 (Claims App.)). The Examiner finds that Asai teaches the additional limitations recited in claim 4 (Ans. 5). The Appellant argues that “cells” as recited in claim 4 are distinguished from “housing” recited in claim 1 (Appeal Br. 7).

We agree with the Examiner. Asai teaches the further limitations recited in claim 4 (*see* Asai ¶ 52 (“the battery stack **10** is made by stacking a plurality of rectangular battery cells **1**”).

For these reasons, we also uphold the Examiner’s rejection as maintained against claim 4.

#### IV. CONCLUSION

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Evidentiary Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1, 3–7, 10, 11, and 21–23	103	Asai and Tudron	1, 3–7, 10, 11, and 21–23	

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