



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/640,776	12/18/2006	Ryuichi Amagai	17303/003001	7850
22511	7590	03/12/2013	EXAMINER	
OSHA LIANG I.L.P. TWO HOUSTON CENTER 909 FANNIN, SUITE 3500 HOUSTON, TX 77010			FORREST, MICHAEL	
			ART UNIT	PAPER NUMBER
			1734	
			NOTIFICATION DATE	DELIVERY MODE
			03/12/2013	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@oshaliang.com
hathaway@oshaliang.com
stewart@oshaliang.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RYUICHI AMAGAI

Appeal 2012-001586
Application 11/640,776
Technology Center 1700

Before BRADLEY R. GARRIS, RICHARD TORCZON, and
BEVERLY A. FRANKLIN, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1-19.¹ We have jurisdiction under 35 U.S.C. § 6.

We AFFIRM.

Appellant claims a battery module comprising a plurality of flat, stacked batteries having electrode terminals and a plurality of electrically insulating spacers, "wherein the electrically insulating spacers support the electrode terminals spaced from each other in the thickness direction of the flat batteries" (independent claims 1 and 19). Appellant also claims a method of forming such a battery module having the above quoted feature (independent claim 16).

Representative claim 1 reads as follows:

1. A battery module, comprising:

a plurality of flat batteries stacked upon one another in a thickness direction and having an outer cover and plate-shaped electrode terminals connected to each other;

a power generating element sealed within the outer cover of each of the plurality of flat batteries, wherein the electrode terminals include substantially flat plates connected to the power generating element and projecting out of the outer cover in a projecting direction; and

a plurality of electrically insulating spacers receiving the electrode terminals of more than one of the flat batteries and stacked in the thickness direction of the flat batteries, wherein at least one of the insulating spacers has at least one opening along a projecting direction of at least one of the electrode

¹ An oral hearing for this appeal was held on March 5, 2013.

terminals so as to expose a portion of the at least one electrode terminal,

wherein the electrically insulating spacers support the electrode terminals spaced from each other in the thickness direction of the flat batteries.

Under 35 U.S.C. § 102(b), the Examiner rejects all independent claims 1, 16, and 19 as well as dependent claims 2, 4, 6-8, 12, 13, and 17 as anticipated by Higashino (US 2004/0021442 A1, published Feb. 5, 2004).

Under 35 U.S.C. § 103(a), the Examiner rejects the remaining dependent claims on appeal as unpatentable over Higashino alone or further in view of other prior art.

Appellant states that "all claims 1-19 either stand or fall together" (App. Br. 6). We select independent claim 1 as representative of the rejected claims with which all other claims will stand or fall.

The pivotal issue in this appeal is whether the Examiner erred in finding that Higashino satisfies the above quoted claim 1 limitation. We agree with this finding for the reasons well expressed by the Examiner in the Answer. The following comments are added for emphasis.

The Examiner relies on Figure 2 of Higashino as evidence that portions of support plates (i.e., electrically insulating spacers) 40 directly support electrode terminals 15 (Ans. 15-17).

Appellant argues that, because Figure 2 is an exploded view, "no direct inference may be made with respect to which parts may contact other parts . . . when assembled" (Reply Br. para. bridging 10-11).

Appellant's argument is not persuasive. The disposition of plates 40 and terminals 15 shown in Figure 2 reasonably supports the Examiner's

finding that portions of plates 40 directly support terminals 15 in Higashino's assembled battery module. This finding is further supported by Higashino paragraph [0058] (cited by Appellant, e.g., at App. Br. para. bridging 14-15 and Reply Br. 11) which discloses that electrode tabs (i.e., terminals) 15 and 16 "are positioned on both ends of the notched portions **40b** of the first support plates **40**" (Higashino 4, ll. 2-3).^{2,3}

The Examiner also finds that Higashino's support plates at least indirectly support the terminals because these plates hold busbars which in turn contact the terminals (Ans. 19).

In response, Appellant argues that "[t]he Examiner appears to be making assumptions that are neither taught nor suggested within the four corners of Higashino" (Reply Br. 12).

We find no convincing merit in this argument. Indeed, this argument is contrary to Appellant's concession that paragraph [0058] of Higashino teaches the electrode terminals are in contact with busbars 42 (*id.* at 11) and the busbars are temporarily held by a portion of support plate 40 (App. Br. para. bridging 14-15). These conceded teachings of Higashino paragraph [0058] support the Examiner's finding that the terminals are indirectly

² At the oral hearing for this appeal, counsel for Appellant seemed to express the view that Higashino's notched portions 40b are merely openings which provide alignment in the X and Y directions. Such a view is incorrect as revealed by Figure 3 of Higashino. Counsel may have confused notched portions 40b with opening portions 40a.

³ Because the subject application and Higashino share a common assignee (i.e., Nissan Motor Co., Ltd.; *see* App. Br. 4 and Higashino title page), Appellant is in the best position to provide evidence showing the Examiner's above finding to be erroneous.

Appeal 2012-001586
Application 11/640,776

supported by the support plates, thereby satisfying the above quoted limitation of representative claim 1.

For the reasons stated above and in the Answer, we sustain the § 102 rejection of representative claim 1 as well as the § 102 and § 103 rejections of remaining claims 2-19.

The decision of the Examiner is affirmed.

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

kmm