

The opinion in support of the decision being entered today is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TAKAYA SATO, HIROSHI YOSHIDA,
and ZENZO HASHIMOTO

Appeal 2007-2659
Application 09/940,541
Technology Center 1700

Decided: September 18, 2007

Before CHUNG K. PAK, THOMAS A. WALTZ, and
LINDA M. GAUDETTE, *Administrative Patent Judges*.

WALTZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the Primary Examiner's final rejection of claims 1 through 8, which are the only claims pending in this application. We have jurisdiction pursuant to 35 U.S.C. § 6(b).

According to Appellants, the invention is directed to a battery with a container that is covered over the outer peripheral surface with an ion impermeable and extensible high polymer sheet having a tensile elongation percentage of 1% or more (Br. 2). Independent claim 1 is illustrative of the invention and a copy of this claim is reproduced below:

1. A lithium based battery comprising a battery container containing therein:

a cell structure group formed by stacking unit cells each including a positive electrode, a negative electrode, and a separator interposed therebetween, or formed by repeatedly folding or winding an integral body of said unit cells; and

an electrolyte, which is poured in said battery container after said cell structure group is contained in said battery container,

wherein said battery is characterized by the presence on the outer peripheral surface of said battery container of a covering that consists essentially of an ion impermeable and extensible high polymer sheet having a tensile elongation percentage of 1 % or more, and

wherein the tensile elongation of the battery container covering is selected to cause the sheet to provide insulation between the positive and negative electrodes of the battery when the container is deformed.

The Examiner has relied on the following prior art references as evidence of obviousness:

Yoshihisa (JP ‘708)(as translated)	JP 10-208708	Aug. 7, 1998
Tatsuki (JP ‘564)(as translated)	JP 2000-173564	Jun. 23, 2000

ISSUES ON APPEAL

Claims 1-8 stand rejected under 35 U.S.C. § 103(a) as unpatentable over JP ‘708 in view of JP ‘564 (Answer 3).

Appellants contend that each of claims 1-8 expressly requires that the tensile elongation of the battery container covering is selected such that the high polymer sheet provides insulation between the positive and negative electrodes of the battery when the container is deformed, and the Examiner has failed to demonstrate that the prior art teaches this aspect (Br. 5; Reply Br. 1-2). Appellants further contend that the outer covering layer of JP ‘564 is adhered or laminated to the battery container, and thus this reference shows that the covering does not move into the battery to shield the electrodes when the container is pierced by a needle (Br. 4). Appellants contend that “covered” in the present claims must be construed as meaning that the high polymer sheet is not laminated or adhered to the container (Br. 5-6).

The Examiner contends that “covering” should be construed as a separate sheet or a laminated sheet, as understood in light of the Specification, and is not limited to specific embodiments (Answer 6-7).

Accordingly, the issue presented in this appeal is as follows: Has the Examiner established a prima facie case of obviousness in view of the proper construction of the claim language?

We determine that the Examiner has not established a prima facie case of obviousness in view of the reference evidence in light of our claim construction as set forth below. Therefore, for the reasons stated in the Brief, Reply Brief, and set forth below, we REVERSE the sole ground of rejection presented in this appeal.

OPINION

Implicit in our review of the Examiner’s obviousness analysis is that the claim must first have been correctly construed to define the scope and

meaning of each contested limitation. *See Gechter v. Davidson*, 116 F.3d 1454, 1460 n.3, 43 USPQ2d 1030, 1035 n.3 (Fed. Cir. 1997). During examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification. *See In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995). The Examiner should only limit the claim based on an express disclaimer of a broader definition. *See In re Bigio*, 381 F.3d 1320, 1325, 72 USPQ2d 1209, 1210-11 (Fed. Cir. 2004).

In view of the preceding legal principles, we determine that the contested limitation of “covering” would have reasonably been interpreted as being a separate sheet or an adhered or laminated sheet since Appellants’ Specification includes separate or laminated sheets with no express disclaimer of any broad definition (*see* the Specification 8-9). Appellants expressly admit that “covered” could be construed to include coverings that are laminated to the containers (Br. 5). Appellants have not presented any reasons why the specific embodiments of their Specification should be read into the claims. However, even in view of our claim construction, the Examiner has not established why the applied prior art would have rendered obvious the claim limitation that “the tensile elongation of the battery container covering is selected to cause the sheet to provide insulation between the positive and negative electrodes of the battery when the container is deformed” (*see* claim 1, last clause). Although Appellants repeatedly argue this claim limitation (Br. 5; Reply Br. 1-2), the Examiner has not specifically addressed this argument (Answer 5-7).

This last clause of claim 1 on appeal requires the battery container covering, whether laminated or a separate sheet, to be capable of providing

Appeal 2007-2659
Application 09/940,541

insulation between the positive and negative electrodes when the container is deformed, e.g., when a needle or nail penetrates the container wall (Specification 5:27-35; 29:5-23; and Fig. 15). We determine that JP '564, which is relied upon by the Examiner to show an improved battery container covering (Answer 4), clearly discloses that any deformation of the container produces a hole which is subsequently occluded but where the covering layer does not provide insulation between the electrodes. *See* JP '564, ¶¶ [0008], [0014], [0020], [0021], [0027], [0034], and especially Fig. 6. Accordingly, since the Examiner has not shown why this limitation has been rendered obvious by the combination of JP '708 and JP '564, we determine that the Examiner has not met the initial burden of proof in establishing a *prima facie* case of obviousness. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Therefore, we cannot sustain the rejection on appeal.

The decision of the Examiner is reversed.

REVERSED

sld/ls

BIRCH, STEWART, KOLASCH & BIRCH
P.O. BOX 747
FALLS CHURCH, VA 22040-0747