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 STANLEY R. KELLENBERGER, VINCENT B. NEWBILL,
DANIEL T. QUILLIN, WENDY L. VAN DYKE,
JAMES HONGXUE WANG and JENNIFER L. MARVIN

Appeal 2006-3388
Application 10/246,800
Technology Center 3700

Decided: September 27, 2007

Before: MURRIEL E. CRAWFORD, JENNIFER D. BAHR and
LINDA E. HORNER, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 (2002) from a final rejection of claims 1 to 45 and 47 to 71. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

Appellants invented an absorbent elastomeric material comprising an elastomeric substrate and a superabsorbent polymer non-adhesively attached to the substrate (Specification: 2).

Claim 1 under appeal reads as follows:

> 1. An absorbent, elastomeric material comprising:
>
> an elastomeric substrate comprising at least one open web facing; and
>
> a superabsorbent polymer with a crosslinker non-adhesively attached to the open web facing.

The Examiner rejected claims 1 to 28, 31 to 45, 47 to 59 and 61 to 71 under 35 U.S.C. § 103 (a) as being unpatentable over Osborn in view of Whitmore.

The Examiner rejected claims 29, 30, 60 and 61 under 35 U.S.C. § 103(a) as being unpatentable over Osborn in view of Whitmore and Nogata.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Nogata	US 5,728,461	Mar. 17, 1998
Whitmore	US 6,417,425B1	Jul. 09, 2002
Osborn	WO 94/02094	Feb. 03, 1994

Appellants contend that there would be no reason to modify the device disclosed in Osborn to include a superabsorbent polymer with a crosslinker non-adhesively attached to the open web facing of the elastomeric substrate.

Appellants further contend that there is no teaching or suggestion in either Osborn or Whitmore of an absorbent elastomeric material having a superabsorbent polymer spread through at least about 50% of the thickness of the open web of an elastomeric substrate.

ISSUES

The first issue is whether the Appellants have shown that the Examiner erred in holding that a person of ordinary skill in the art would have had reason to modify the device disclosed in Osborn to include a superabsorbent polymer with a crosslinker non-adhesively attached to the open web facing of the elastomeric substrate.

The second issue is whether the Appellants have shown that the Examiner erred in holding that it would have been obvious at the time of the invention to form an absorbent article that has a superabsorbent polymer spread through at least about 50% of the thickness of the open web of an elastomeric substrate.

FINDINGS OF FACT

Osborn discloses an absorbent article formed of an elastomeric substrate structure comprising an open web facing non-adhesively attached to a superabsorbent material (Page 12). The superabsorbent material comprises a gelling agent formed by particles of substantially water-insoluble, slightly cross-linked, partially neutralized, hydrogel-forming polymer material (Page 11). The superabsorbent polymer may be adhered to the elastomeric substrate by using a chemical such as glycerol or glycerin to swell the superabsorbent material particles and make the surface of the particles tacky so that they adhere to the fibers of the elastomeric substrate

(Page 12). The superabsorbent material may also be fibers which can be integrally formed with the elastomeric substrate (Page 12). The elastomeric substrate may comprise polyester or polypropylene (Page 10). Osborn teaches that there is a z direction distribution of the superabsorbent material in the elastomeric substrate (Page 16). Osborn does not disclose a crosslinker non-adhesively attached to the elastomeric substrate.

Whitmore discloses an absorbent article formed of a fibrous material substrate non-adhesively attached to a superabsorbent material (col. 1, l. 6 to 7; col. 2, ll. 45 to 56). The superabsorbent material includes a crosslinker (col. 5, ll. 23 to 49). The superabsorbent material is sprayed on the fibrous material (col. 11, ll. 43 to 44). After spraying the superabsorbent material on the fibrous material, the composite is subjected to conditions under which the superabsorbent material polymerizes (col. 14, ll. 41 to 44). The fibrous web may be formed of polyester or polypropylene (col. 11. l. 64 to col. 12, l. 4). Whitmore teaches that the process therein disclosed results in a matrix having a superabsorbent polymer uniformly distributed therein and thereby results in a structure with a reduced likelihood of super-absorbent shifting which leads to uneven absorption of fluids (col. 2, ll. 34 to 42).

DISCUSSION

We will sustain the Examiner's rejection of claims 1 to 28, 49 to 59 and 61 to 71 as being unpatentable under 35 U.S.C. § 103(a) over Osborn in view of Whitmore. We are not persuaded by Appellants' argument that one of ordinary skill in the art would not have been motivated to modify the Osborn absorbent article so as to include a crosslinker in view of the

teachings of Whitmore because Whitmore relates to a non-elastic substrate adhered to a superabsorbent polymer to form an acquisition layer. While it may be true that the Whitmore non-elastic absorbent article is an acquisition layer which is only required to temporarily hold fluids, such a layer is nevertheless an absorbent layer. The teaching in Whitmore that the process disclosed results in an absorbent article with a more evenly distributed superabsorbent polymer thereby resulting in an article that more evenly absorbs fluid, is equally, if not more, applicable to the Osborn elastic article which is required to permanently hold fluids. We note that the application of the known process as evidenced in Whitmore to improve the even absorption of the Osborne absorbent article is nothing more than using a known technique to improve a similar device in the same way and would have been obvious at the time of the invention. *See KSR Int'l Co. v. Teleflex Inc.,* 127 S.Ct. 1727, 1742, 82 USPQ2d 1385, 1396 (2007).

In view of the foregoing, we will sustain the Examiner's rejection of claim 1. We will also sustain this rejection as it is directed to claims 2 to 28, 49 to 59 and 61 to 71 because the Appellants have not argued the separate patentability of these claims.

We will not sustain the rejection as it is directed to claims 31 to 45, 47, and 48 because neither Osborn nor Whitmore discloses a superabsorbent polymer spread through at least about 50% of the thickness of the elastomeric substrate as required by claim 31. While the Examiner is correct that the superabsorbent polymer disclosed in Osborn has a z direction distribution of the superabsorbent material in the elastomeric substrate, such

is not a disclosure or suggestion that this z distribution spreads through at least 50% of the thickness of the elastomeric substrate.

We will sustain the Examiner's rejection of claims 29 to 30 and 60 to 61 under 35 U.S.C. § 103 as being unpatentable over Osborn in view of Whitmore and Nogata. Appellants make the same arguments regarding the combination of Osborne and Whitmore as were made in response to the rejection of claim 1. Appellant's argument that Nogata does not disclose the incorporation of a superabsorbent polymer into a fiber product is not persuasive as we have found this teaching in the combined teachings of Osborn and Whitmore.

AFFIRMED-IN-PART

vsh

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