

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte  
PALANI RAJ RAMASWAMI WALLAJAPET,  
ALICE Y. ROMANS-HESS,  
EDWIN T. TA, and JIAN QIN,

Appeal No. 2002-0356  
Application No. 09/188,358

**ON BRIEF**

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Before LIEBERMAN, DELMENDO and PAWLIKOWSKI, Administrative Patent Judges.

LIEBERMAN, Administrative Patent Judge.

**DECISION ON APPEAL**

## **THE INVENTION**

The invention is directed to an absorbent structure wherein the structure comprises a water swellable, water insoluble polymer having acidic functional groups, a basic material and the presence in some embodiments of a buffering agent. At least 50 percent of the acid functional groups are in free acid form. Additional limitations are described in the following illustrative claim.

## **THE CLAIMS**

Claims 1 and 4 are illustrative of appellants' invention and are reproduced below.

1. An absorbent structure having an upper surface comprising:

a) a water-swellaable, water-insoluble polymer having acidic functional groups, wherein the water-swellaable, water-insoluble polymer has at least about 50 molar percent of the acidic functional groups in free acid form; and

b) a basic material;  
wherein the absorbent structure exhibits a Wicking Capacity value that is at least about 5 grams per gram of absorbent structure and exhibits a pH on the upper surface that remains within the range of about 3 to about 8.

4. The absorbent structure of Claim 1 wherein the absorbent structure further comprises a buffering agent having a pKa between about 2 and about 10.

### **THE REJECTIONS**

Claims 4, 14 through 16, 20, 30 and 31 stand provisionally rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 1, 14 through 17, 30 and 31 of copending Application Serial No. 08/989,555.

Claims 36 and 52 stand provisionally rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 1 and 17 of copending Application Serial No. 08/989,556.

Claims 1 through 32 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 32 of copending Application Serial No. 08/989,555 in view of Palumbo.

Claims 33 through 64 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 32 of copending Application Serial No. 08/989,556 in view of Palumbo.

the examiner and agree with the examiner that the rejections of claims on the grounds of double patenting and the rejection of claims 1 through 3, 5 through 13, 17 through 19, 21 through 29, 33 through 35, 37 through 45, 49 through 51 and 53 through 61 under § 103 are well founded. Accordingly, we affirm these rejections. We agree with appellants, however, that the rejection of claims 4, 14-16, 20, 30 through 32, 36, 46 through 48, 52 and 62-64 under § 103 is not well founded. Accordingly, we reverse this rejection.

### **The Rejection Under § 103(a)**

As an initial matter the appellants have established four groups of claims which are believed to be separately patentable. See Brief, page 2. We find however, that with respect to the rejection under § 103, Groups 1 and 2 are argued together as are groups 3 and 4. See Brief, page 2. Accordingly, we select claims 1 and 4, as representative of the two groups of claims and limit our consideration thereto. See 37 CFR 1.192(c)(7) (2000).

Turning initially to Groups 3 and 4, we find that Palumbo is directed to a superabsorbent which has application in the production of hygienic, sanitary products such

See abstract and page 4, lines 24 -37. We find that preferably the anionic and cationic absorbent has from 50 to 100% of the functional groups in free acid or base form respectively. See page 5, lines 5-9. We conclude therefrom that Palumbo discloses components a) and b) of the claimed subject matter.

Specifically, the anionic superabsorbent is exemplified by materials utilizing base polymers of polyacrylamide, polyvinyl alcohol, and polyacrylic acid among a limited group of other polymeric materials disclosed. See page 6, line 22 through page 7, line 2. We find that the cationic superabsorbent is preferably a polymer prepared from diallyl dimethyl ammonium chloride or hydroxide. See page 9, lines 6-7. The anions present however include organic ions such as citrate. See page 9, lines 1-3. We find that the cationic polymer is exemplified by a polymer of diallyl dimethyl ammonium chloride. See page 12, lines 5-25. We find that the anionic polymer is exemplified by polyacrylic acid. See page 13, lines 11-29, in conjunction with page 7, lines 4-36 directed to the presence of carboxyl functional groups and acrylic acid specifically. See page 7, line 34.

We further find that the super absorbents can typically absorb up to 100 times their own weight of water. See page 1, lines 12-14. Stated otherwise each gram of absorbent

has an upper surface, we find that the disclosure of the gel in a tea bag type envelope is sufficient to meet the aforesaid requirement. See page 14, line 10. Moreover the utilization by Palumbo of the same structures as those disclosed in the specification, page 1, lines 16-17, is sufficient to establish that each possesses an upper surface.

Finally, Palumbo discloses that, “[m]ost preferably the anionic and cationic superabsorbents are used such that they have equal exchange power so that pH extremes in the bodily fluids absorbed are not reached.” See page 11, lines 14-17. We conclude that control of the pH which is significant in the products being prepared both by Palumbo and applicants is a result effective variable. It is well settled that discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980); *In re Antonie*, 559 F.2d 618, 620, 195 USPQ 6, 8-9 (CCPA 1977); and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Accordingly, we conclude that the disclosure of Palumbo is suggestive of the pH requirements of the claimed subject matter.

We note that the acidic polymer of the claimed subject matter includes polyacrylic acids, claim 6, the basic materials include polymers such as polydiallyl dimethyl ammonium

4 of the claimed subject matter.

As to Groups 1 and 2 further directed to the presence of a buffering agent, it is the examiner's position that the presence of citrate anions in conjunction with the polydiallyl dimethyl ammonium polymer in and of itself acts as a buffering agent as required by the claimed subject matter. See Answer, pages 5 and 6. We disagree. Groups 1 and 2 require the presence of three separate and distinct components, wherein the buffering agent is a separate component. Even if the citrate anions in conjunction with the basic polymer of Palumbo were effective to function as a buffer and there is no evidence in support of this proposition, it would nonetheless be insufficient to meet the requirements of the claimed subject matter directed to three separate and distinct components wherein one of the components is a buffering agent having a pKa between 2 and about 10.

Accordingly, we cannot sustain the rejection of the claims directed to Groups 1 and 2 under § 103 over Palumbo.

### **THE DOUBLE PATENTING REJECTIONS**

As an initial matter it is well accepted that it is within the jurisdiction of this Board to review and decide issues directed to provisional rejections including those rejections on

As to the rejection provisionally directed to § 101, the appellants have stated that they will cancel claims if the identical claim in the other, copending application is allowed. See Brief, page 2. We consider this sole statement to be an acquiescence to the examiner's rejection and we summarily affirm the rejections under § 101.

As to the obviousness type double patenting rejections over claims 1-32 of 08/989,555 and claims 33-64 of 08/989,556, each in view of Palumbo, we note the identity in each of the other applications of claims directed to a three component composition comprising an acidic material, a basic material and a buffering agent. See claim 1 of 08/989,955 which is directed to components a) and b) of claim 1 of the instant claimed subject matter. Furthermore, the acidic functional materials of claim 6 containing polyacrylic acids and other components overlap the acidic material of instant claim 6. Similarly, the basic materials of the instant claim 8 are included in claim 8 of 08/989,955. Finally, the buffering agent of claim 4 of the claimed subject matter is identical to that of claim 1 of 08/989,955.

A similar analysis applies to the obviousness type double patenting rejection over claims 33-64 of 08/989,556. We find that components a) and b) are disclosed in claim

reaching our decision.

### **DECISION**

The rejection of claims 4, 14 through 16, 20, 30 and 31 under 35 U.S.C. § 101 as claiming the same invention as that of claims 1, 14 through 17, 30 and 31 of copending Application Serial No. 08/989,555 is affirmed.

The rejection of claims 36 and 52 under 35 U.S.C. § 101 as claiming the same invention as that of claims 1 and 17 of copending Application Serial No. 08/989,556 is affirmed.

obviousness-type double patenting as being unpatentable over claims 1 through 32 of copending Application Serial No. 08/989,556 in view of Palumbo is affirmed.

The rejection of claims 1 through 3, 5 through 13, 17 through 19, 21 through 29, 33 through 35, 37 through 45, 49 through 51 and 53 through 62 under 35 U.S.C. § 103(a) as being unpatentable over Palumbo is affirmed.

The rejection of claims 4, 14-16, 20, 30 through 32, 36, 46 through 48, 52 and 62-64 under 35 U.S.C. § 103(a) as being unpatentable over Palumbo is reversed.

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 CFR § 1.136(a).

AFFIRMED

