

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES R. GROSS

Appeal No. 97-2554
Application No. 08/164,112¹

ON BRIEF

Before CALVERT, MEISTER and McQUADE, Administrative Patent Judges.

CALVERT, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed December 7, 1993. According to appellant, this application is a continuation-in-part of Application 07/858,477 filed March 27, 1992, now abandoned.

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This is an appeal from the final rejection of claims 1, 3 to 7 and 10 to 16.² The other claims remaining in the application, claims 21 to 37, stand withdrawn from consideration under 37 CFR 1.142(b) as being directed to a nonelected invention.

Claim 1, the only independent claim on appeal, reads:

1. A method for reducing malodor associated with a disposable absorbent product intended for the absorption of body fluid, said method comprising the step of:

applying to said absorbent product comprising an absorbent structure exhibiting a weight and comprising from about 30 to 100 weight percent, based on total weight of the absorbent structure, of a hydrogel-forming polymeric material, prior to use of the absorbent product, a surface-active agent having a hydrophilic/lipophilic balance (HLB) of less than about 12 in an amount effective to reduce urine odor wherein said surface-active agent is applied to the absorbent product in an amount of from about 0.005 to about 25 weight percent based on total weight of the hydrogel-forming polymeric material.

Claims 1, 3 to 7 and 10 to 16 stand finally rejected under 35 U.S.C. § 112, first paragraph, as being based on a specification which fails to enable the breadth of the claims.

² Claim 20, also finally rejected, was cancelled by the amendment filed on February 12, 1996 (Paper No. 19). This amendment also amended claim 1, thereby overcoming a rejection of claim 1 under 35 U.S.C. § 112, first paragraph, "with respect to the % by wt of hydrogel material" (Advisory Action, March 5, 1996 (Paper No. 20)).

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Background

Appellant's invention concerns the reduction in the malodors in disposable absorbent products, in particular, the odor of urine in disposable products such as diapers which have an absorbent structure which includes a so-called "superabsorbent" (page 4, line 10 et seq.). According to the disclosure, such reduction is achieved by applying to the absorbent material, prior to use, "an effective amount of a surface-active agent having a hydrophilic/lipophilic balance (HLB) of less than about 12" (page 6, lines 36 to 37).

However (page 7, lines 28 to 37):

Not all of the surface-active agents having an HLB of less than 12 are able to reduce the odor of urine. Applicant has devised a simple test to determine whether or not a given surface-active agent, having an HLB of less than 12, is capable of reducing the odor of urine. The test method for determining whether or not a surface-active agent is able to reduce the odor of urine (Surface-Active Agent Effectiveness Test) is set forth in connection with the examples which follow. If a surface-active agent has an HLB of less than 12 and is capable of reducing the odor of urine, it is believed suitable for use in the present invention.

On page 9, appellant lists as "suitable for use in the present invention (as determined by the Surface-Active Agent Effectiveness Test set forth below)" the surfactants Tween 81,

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Span 80, and Tergitol 15-S-5. Surfactants named as "proven to be unsuitable for use in the present invention in that they are not able to reduce the odor of urine as determined by the Surface-Active Agent Effectiveness Test" are Lexemul 530, Igepal CO-210 and CO-430, and Unithox 450.

On pages 12 and 13, appellant discloses his Surface-Active Agent Effectiveness Test. A solution in ethanol of the surface-active agent to be tested is sprayed on absorbent material; then (page 12, line 33 to page 13, line 3):

1.5 grams of the coated, particulate water-swellable, generally water-insoluble absorbent material is placed in a watch glass. Four drops (about 0.2 milliliters) of reconstituted urine (UriChem®) is applied to the coated absorbent material. 1.5 grams of the particulate, water-swellable, generally water-insoluble, hydrogel-forming polymeric absorbent material having no surface-active agent coated thereon is placed in a watch glass and serves as a control sample. Four drops of reconstituted urine (UriChem®) is applied to the absorbent material (control). The two samples are then subjected to the Odor Perception Test described above.

The Odor Perception Test is described as follows (page 12, lines 6 to 12):

Odor perception is, by its nature, a very subjective determination. According to the procedure, a small group of up to four samples are [sic] reviewed at one time. The samples to be tested are provided to

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a panel of two odor specialists who independently rank the urine-wet odor of the samples on a scale of 1 (least) to 10 (most) for malodor and intensity. Samples yielding an odor ranking below about 3.0 possess an odor which would hardly be noticed by the general public.

As a result of these tests (page 13, lines 3 to 7):

If the surface-active agent coated test sample receives a lower average ranking for malodor and intensity than the non-surface-active agent coated test sample (control), the surface-active agent being tested is considered effective to reduce the odor of urine.

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The results of tests on various surfactants are given in Examples 1 to 3 on pages 13 to 17.

The Rejection

The rejection is based upon the examiner's objection to the specification (answer, page 3):

as failing to enable the breadth of the claims, that is the use of certain surfactants within the claimed HLB range would render the device inoperative. Not all surfactants with an HLB less than 12 will be effective to reduce urine odor. See M.P.E.P. §§ 706.03(n) and 706.03(z)^[3].

According to the examiner (answer, pages 4 and 5; original emphasis):

Applicant argues that the claims exclude those surfactants that do not reduce urine odor but that do have an HLB less than 12. See applicant's brief on page 3, lines 9-16. The examiner does not agree with applicant's arguments. In reference to claim 1, the claim requires a surfactant with an HLB less than 12 **in an amount effective to reduce urine odor**. The claim does not exclude those surfactants with an HLB less than 12 that do not reduce urine odor. In other words, applicant has claimed a surfactant with an HLB less than 12 and has also claimed that it is present in an amount effective to reduce urine odor. This is not what applicant has disclosed in the specification. What happens when the surfactant used does not reduce urine odor? It will not matter how much of the surfactant is present because it

³ These sections have since been deleted, and appear to be replaced by M.P.E.P. § 2164.08.

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will not reduce urine odor. The examiner takes the position that claim 1 as presently pending claims surfactants that will work and surfactant that will not work. The scope of the claims are [sic] not enabled by the specification.

Discussion

In In re Moore, 439 F.2d 1232, 169 USPQ 236 (CCPA 1971), the claims were rejected under 35 U.S.C. § 112, both under the first paragraph, as being of a scope not supported by an adequate enabling disclosure, and under the second paragraph as indefinite. The Court held that the determination of compliance with the second paragraph of § 112 must be made first "in order to determine exactly what subject matter [the claims] encompass" (439 F.2d at 1235, 169 USPQ at 238):

This first inquiry therefore is merely to determine whether the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity. It is here where the definiteness of the language employed must be analyzed - not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art.²

² It is important here to understand that under this analysis claims which on first reading - in a vacuum, if you will - appear indefinite may upon a reading of the specification disclosure or prior art teachings become quite definite. It may

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be less obvious that this rule also applies in the reverse, making an otherwise definite claim take on an unreasonable degree of uncertainty. See *In re Cohn*, 58 CCPA [996], [438] F.2d [989], 169 USPQ 95 (1971), *In re Hammack*, 57 CCPA 1225, 427 F.2d 1378, 166 USPQ 204 (1970).

The language of interest in the present case is the recitation in claim 1 of "applying ... a surface-active agent having a hydrophilic/lipophilic balance (HLB) of less than about 12 in an amount effective to reduce urine odor." Appellant asserts that his claims "recite the use of a surface-active agent that is effective in reducing the odor of urine." However, we agree with the examiner that they are not so limited, as is evident from the above-quoted portion of claim 1.

Nevertheless, assuming that the claims are limited to the use of a surface-active agent, having an HLB less than about 12, that is "effective to reduce urine odor," the claims must still be read in light of the disclosure in order to analyze the definiteness of their language. *In re Moore*, supra. In determining whether a particular surfactant is "effective to reduce urine odor," one finds on page 13, lines 3 to 7, the criterion quoted above, i.e., a surface-active agent "is considered effective to reduce the odor of urine" if the test

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sample (in appellant's Surface-Active Agent Effectiveness Test) "receives a lower average ranking for malodor and intensity than the non-surface-active agent coated sample (control)." This seemingly straightforward definition⁴ is, however, inconsistent with other portions of appellant's disclosure. For example, looking at Table 1 (page 14), we see that Unithox 450 (Sample 4C) has an Odor Ranking lower than the control (Sample 4A), and therefore would appear to meet the definition of a surface-active agent effective to reduce the odor of urine. Nevertheless, on page 9, lines 14 to 24, appellant lists Unithox 450 as a surfactant which is "not able to reduce the odor of urine." This would seem to indicate that some other test has been applied to determine odor-reducing ability. Similarly, we note that in Table 1 Igepal CO-210 (Sample 3B) and CO-430 (Sample 3D) have Odor Rankings of 5.0 and 4.8, respectively, which are lower than any of the

⁴ We do not reach the question of the adequacy of the Surface-Active Agent Effectiveness Test, referred to on page 5 of the examiner's answer. Our discussion here is based on the Test results reported in appellant's Examples.

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controls except Sample 4A, but are still listed on page 9 as
"not able to reduce the odor of urine."⁵

⁵ We realize on page 14, lines 3 to 5, appellant states that "[A]s discussed above" (a discussion which we cannot find) "comparison between groupings of samples is not appropriate, as a control sample was not present in each of the groupings." Notwithstanding the lack of a control sample for Samples 3A to 3D, however, appellant still discloses that Span 80 (Sample 3A) is suitable, and that the other three samples are not.

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The purpose of the second paragraph of § 112 is:

to provide those who would endeavor, in future enterprise, to approach the area circumscribed by the claims of a patent, with the adequate notice demanded by due process of law, so that they may more readily and accurately determine the boundaries of protection involved and evaluate the possibility of infringement and dominance.

In re Hammack, 427 F.2d at 1382, 166 USPQ at 208. The present claims do not fulfill this purpose. Even assuming that they should be read as being drawn to the application of surface-active agents having an HLB less than about 12 which are effective to reduce urine odor, the discrepancies and inconsistencies in the specification, as discussed above, are such that one of ordinary skill could not determine whether or not the use of a particular surfactant would fall within the scope of claim 1. As stated in In re Cohn, 438 F.2d at 993, 169 USPQ at 98, "[N]o claim may be read apart from and independent of the supporting disclosure on which it is based." If one of ordinary skill contemplated the use of Unithox 450, for example, in the claimed method, it could not be determined whether it would fall within the scope of the claims because on the one hand it would meet the test set forth on page 13, lines 3 to 7, as being "effective to reduce

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the odor of urine," but on the other hand, evidently would not meet some other (undisclosed) test, since it is disclosed on page 9, lines 14 to 24, as "not able to reduce the odor of urine."

Accordingly, pursuant to 37 CFR § 1.196(b), claims 1, 3 to 7 and 10 to 16 are rejected as failing to comply with the second paragraph of 35 U.S.C. § 112.

In view of the foregoing, since the subject matter defined by the claims is not clear and definite, the analysis as to whether their scope is enabled cannot be made. In re Moore, supra. The rejection under the first paragraph of § 112 is therefore reversed, pro forma. Cf. In re Steele, 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962). This is not to say, however, that if the rejection under the second paragraph of § 112 were overcome the rejection under the first paragraph would necessarily be inapplicable.

Conclusion

The examiner's decision to reject claims 1, 3 to 7 and 10 to 16 is reversed, and said claims are rejected pursuant to 37 CFR § 1.196(b).

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This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b)(amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that, "A new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (§ 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED, 1.196(b)

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Administrative Patent Judge))	
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