

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 KENT K. FUNG,
DENNIS B. JENKINS, WENDY L. PING,
DANIEL E. WHEELER, and RAMESH HERNLEM

Appeal 2007-2028
Application 11/058,147¹
Technology Center 3600

Decided: July 17, 2007

Before ERIC GRIMES, NANCY J. LINCK, and
RICHARD M. LEBOVITZ, *Administrative Patent Judges*.

GRIMES, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to animal litter compositions. The Examiner has rejected the claims as obvious. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

¹ Application Serial No. 10/215,174 is also on appeal before the Board as Appeal No. 2007-2814.

BACKGROUND

“A major problem with the absorbent materials [used in pet litter boxes] is that after a relatively short period of time, the . . . soiled absorbent emits objectionable odors . . .” (Specification 1). When the odors “become intolerable, the homeowner discards the absorbent material. The homeowner then washes the litter box and refills it with fresh absorbent material. These activities are, however, unpleasant, time-consuming and expensive” (*id.*).

The Specification discloses “a low cost, litter composition that substantially reduces the emanation of offensive odors . . .” (*id.* at 3). In one embodiment the litter comprises “substantially particulate silica gel material with a particle size distribution between 1-2 mm and up to 2% of a material selected from the group consisting of a fixing agent, a colorant agent, an anti-bacterial agent, a fragrance, a supplemental absorbent material, an odor-controlling/inhibiting active, and mixtures thereof” (*id.*).

DISCUSSION

1. CLAIMS

Claims 1-20 are pending and on appeal. Claims 1 and 19 are representative and read as follows:

1. An animal litter comprising:
 - a substantially particulate silica gel material with a particle size distribution between 0.15-2 mm.

19. An animal litter comprising:
 - a substantially particulate silica gel material with a particle size distribution between .15-2 mm; and
 - up to 1% of a material selected from the group consisting of a fixing agent, a colorant agent, an anti-bacterial agent, an odor controlling agent, a fragrance and mixtures thereof.

2. PRIOR ART

The Examiner relies on the following references:

Benjamin	US 4,517,919	May 21, 1985
Stanislowski	US 5,018,482	May 28, 1991
Cowan	US 5,207,830	May 4, 1993
Ito	US 5,526,771	Jun. 18, 1996

3. OBVIOUSNESS -- CLAIMS 1-6, 14, 17, and 18

Claims 1-6, 14, 17, and 18 stand rejected under 35 U.S.C. § 103 as obvious in view of Benjamin (Answer 3).

The Examiner cites Benjamin as disclosing “an animal litter comprising a particulate silica gel material” (Final Rejection 2). The Examiner states that one of ordinary skill in the art would have considered it obvious to use a particle size distribution “between 0.15-2 mm . . . in the litter of Benjamin et al., since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable value/ranges until the desired effect is achieved involves only routine skill in the art” (*id.*). The Examiner also points out that, at column 6, line 8, Benjamin “appears to teach a value, i.e. 1mm, within the range as claimed by Appellant” (Answer 4).

“[W]here there is a range disclosed in the prior art, and the claimed invention falls within that range, there is a presumption of obviousness.” *Iron Grip Barbell Co., Inc. v. USA Sports, Inc.*, 392 F.3d 1317, 1322, 73 USPQ2d 1225, 1228 (Fed. Cir. 2004). Overlapping ranges also support a prima facie case of obviousness. *See In re Geisler*, 116 F.3d 1465, 1469, 43 USPQ2d 1362, 1365 (Fed. Cir. 1997).

In the instant case Benjamin discloses a “flexible absorbent pad useful as a liner in animal litter boxes” (Benjamin, col. 1, ll. 61-62). Benjamin discloses that the pad comprises “a mixture of hydrophilic fibers and *discrete particles of a water-insoluble hydrogel . . . such as silica gels*” (*id.* at col. 5, ll. 11-30, emphasis added). Regarding the size of the particles to be used in the flexible absorbent pad, Benjamin discloses that “[p]referred for use herein are particles having an (weight) average particle size of from about 50 microns to about 1 mm (*id.* at col. 5, l. 64, through col. 6, l. 8).

Thus, the range of particle sizes preferred in Benjamin’s flexible absorbent structure overlaps with the size ranges recited in the rejected claims. We therefore agree with the Examiner that the claims recite a size range that would have been *prima facie* obvious in light of Benjamin.

Appellants argue that the particles discussed by Benjamin at column 5, lines 25-30, and column 6, lines 5-8, are not components of a particulate litter composition, but are instead ingredients in an absorbent structure comprised of hydrophilic fibers and discrete silica gel particles (Br. 11-12;² Reply Br. 11-14). Appellants argue that the flexible absorbent structure is distinguishable from litter because Benjamin discloses that it can be cut into pads, or used as a liner at the bottom of a litter box and covered with litter (Br. 12).

We do not find these arguments persuasive. It is well settled that “claims in an application are to be given their broadest reasonable interpretation consistent with the specification and that claim language should be read in light of the specification as it would be interpreted by one

² Appeal Brief filed July 26, 2006.

of ordinary skill in the art.” *In re Sneed*, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983) (citation omitted). We agree with the Examiner that, when given its broadest reasonable interpretation in light of the specification, claim 1 encompasses the flexible absorbent pad suggested by Benjamin.

Specifically, claim 1 recites a litter composition “comprising . . . a substantially particulate silica gel material with a particle size distribution between 0.15-2 mm.” As discussed above, Benjamin discloses that the flexible absorbent pad comprises “a mixture of hydrophilic fibers and *discrete particles of a water-insoluble hydrogel . . . such as silica gels*” (*id.* at col. 5, ll. 11-30, emphasis added). We agree with the Examiner that, by disclosing that the flexible structure may contain discrete particles of a hydrogel such as silica gel, Benjamin meets the limitation in claim 1, that the litter contains “substantially particulate silica gel material.”

Appellants argue that “one of ordinary skill would not find a motivation to modify the absorbent pad taught in Benjamin to make the particulate silica gel animal litter material claimed by Appellants” (Br. 12). Rather, Appellants argue, Benjamin teaches away from modifying the flexible absorbent pad to make a particulate litter composition because Benjamin teaches that the pad may be used as a litter box liner when covered with conventional litter (*id.* at 12-14). Appellants argue that modifying the flexible pad to make a litter composition would defeat the pad’s disclosed intended purpose (*id.* at 14-15), and therefore only through hindsight would one of ordinary skill have been motivated to modify Benjamin’s absorbent flexible pad (*id.* at 16-17).

We do not find Appellants' arguments persuasive. The rejected claims do not recite a particulate animal litter composition. Rather, claim 1 recites an animal litter "*comprising . . . a substantially particulate silica gel material with a particle size distribution between 0.15-2 mm*" (emphasis added). For the reasons discussed above, one of ordinary skill need only have followed the reference's explicit teachings to arrive at a composition encompassed by claim 1.

We note that claim 1's preamble states that the composition is "[a]n animal litter." However, it is well settled that an "intended use or purpose usually will not limit the scope of the claim because such statements usually do no more than define a context in which the invention operates." *Boehringer Ingelheim Vetmedica v. Schering-Plough Corp.*, 320 F.3d 1339, 1345, 65 USPQ2d 1961, 1965 (Fed. Cir. 2003). Thus, a prior art product capable of performing a claimed intended use will meet the intended use limitation, even if the prior art does not disclose that the product was actually put to the intended use. *See In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997).

In the instant case, Benjamin discloses that "[i]f the pads are to be used as the sol[i]d absorbent material in the litter box, an appropriate amount of bacteriostat is from about 25 ppm to about 500 ppm by weight of the absorbent pad" (Benjamin col. 4, ll. 44-47). This statement makes it clear that Benjamin's flexible absorbent pad can be used in the intended manner as a material for absorbing animal waste in an animal litter box. Moreover, by disclosing that porous absorbent material such as cloth can be used as litter (Specification 1:30-32), Appellants' own Specification demonstrates

that the term “litter” is not limited to particulate materials typical of commercial cat litter. Thus, Benjamin’s absorbent pad is encompassed by the term “animal litter,” when claim 1 is given its broadest reasonable interpretation in light of the Specification.

Appellants argue that Benjamin does not “disclose, teach or suggest” the claimed particle size distribution (Br. 15). Rather, Appellants argue, “[t]he disclosed examples of hydrogels to be used as a component of a litter box pad include silica gels,” whereas the “[a]bsorbent solid materials suitable for use as animal litters having particle sizes ranging from 2.5 to 13 mm are disclosed in Benjamin” (*id.* at 15-16). Appellants argue that they have demonstrated that the claimed range of particle sizes is critical to the invention (Reply Br. 10-11, 14-15.)

We are not persuaded by these arguments. We agree with Appellants that Benjamin discloses two discrete products. (*See* Benjamin, col. 1, ll. 60-62 (“This invention relates to a solid absorbent material useful as an animal litter, and to a flexible absorbent pad useful as a liner in animal litter boxes.”).) We also agree that Benjamin discloses that, in the “animal litter” material, “[p]article sizes typically range . . . from about 0.25 cm to about 1.3 cm” (*id.* at col. 3, ll. 18-27).

However, as discussed above, Benjamin also discloses that the flexible absorbent pad contains discrete particles which may be silica gel, and that preferred particles have a size of about 50 microns to about 1 mm (*id.* at col. 6, ll. 5-8). Thus, Benjamin suggests a silica gel particle-containing composition useful as litter material that contains particles having

a size range that overlaps with the claimed range. We therefore agree with the Examiner that Benjamin suggests the claimed size range.

To summarize, because Benjamin suggests a composition having the claimed particles in the claimed particle size range, we agree with the Examiner that one of ordinary skill would have considered claim 1 obvious over Benjamin. We therefore affirm the Examiner's obviousness rejection of claim 1 over Benjamin. "[C]laims 2-18 stand or fall with claim 1" (Br. 10).³ We therefore affirm the rejection of claims 1-6, 14, 17, and 18.

4. OBVIOUSNESS -- CLAIMS 7-9, 11-13, 19, and 20

Claims 7-9, 11-13, 19, and 20 stand rejected under 35 U.S.C. § 103 as obvious over Benjamin and Cowan (Answer 3). The Examiner reasons that "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a colorant agent as taught by Cowan et al. in the litter of Benjamin et al. in order to enhance the appearance of the litter composition" (Final Rejection 4). The Examiner urges that the amount of coloring agent recited in the claims would have been obvious "since it has been held that where routine testing and general experimental conditions are present, discovering the optimum or workable value/ranges until the desired effect is achieved involves only routine skill in the art" (*id.*).

Appellants argue that claim 19 is distinguishable over Benjamin and Cowan because "one of ordinary skill in the art would not be motivated to

³ The Reply Brief provides a separate heading and argument for every appealed claim (Reply Br. 10-22), but Appellants' failure to argue the claims separately in the Appeal Brief "constitute[s] a waiver of any argument that the Board must consider the patentability of any grouped claim separately." 37 C.F.R. § 41.37(c)(1)(vii).

use the teachings of Cowan to modify the color of the absorbent pad-like structure, which, as previously discussed, is intended to be covered by conventional litter material in order to enhance its appearance” (Br. 18). Appellants argue that the Examiner’s assertion that determining the suitable amount of pigment or dye for use would have been routine amounts to an improper “obvious to try” rationale (*id.* at 18-19). Appellants argue that because silica gel is yellow, one of ordinary skill in the art would not have been motivated to change the color of Benjamin’s absorbent, since its ultimate destination was a litter box (Reply Br. 17).

We are not persuaded by these arguments. The Supreme Court recently rejected the idea that “obvious to try” is a *per se* improper standard of obviousness. *KSR*, 127 S. Ct. at 1742, 82 USPQ2d at 1397 (“The same constricted analysis led the Court of Appeals to conclude, in error, that a patent claim cannot be proved obvious merely by showing that the combination of elements was ‘obvious to try.’”). Emphasizing a flexible approach to the obviousness analysis, the Court noted that “[a] person of ordinary skill is . . . a person of ordinary creativity, not an automaton.” *Id.* Thus, the analysis under 35 U.S.C. § 103 “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 1741, 82 USPQ2d at 1396.

In our view, one of ordinary skill, being one of ordinary creativity, would have recognized that it was desirable to have litter compositions and accessories with attractive appearances (e.g., for marketing purposes), even if they were ultimately to be covered by other materials. We therefore agree

with the Examiner that one of ordinary skill, recognizing from Cowan that dyes and pigments are conventionally used in litter compositions, would have considered it obvious to enhance the appearance of Benjamin's particle-containing absorbent pad by applying dyes or pigments to it. Also, Benjamin's statement that "[i]f the pads are to be used as the sol[i]d absorbent material in the litter box, an appropriate amount of bacteriostat is from about 25 ppm to about 500 ppm by weight of the absorbent pad" (Benjamin col. 4, ll. 44-47), suggests that the absorbent pad could be used by itself uncovered in a litter box, which would also have suggested making it attractive by adding color to it.

Also, because Benjamin discloses that the absorbent pad could contain as much as 98 % fiber material in addition to silica gel (Benjamin, col. 5, ll. 11-15), we do not agree that the yellow color of silica gel would have dissuaded one of ordinary skill from coloring Benjamin's pad. Thus, we agree with the Examiner that one of ordinary skill would have considered claim 19 obvious over Benjamin and Cowan.

Appellants argue that claim 20 uses the transitional phrase "consisting essentially of" to recite the claimed composition (Br. 20). Appellants argue that Benjamin's composition has hydrophilic fibers, and that Cowan's compositions may contain other ingredients in addition to the ingredients recited in claim 20, and that these references therefore do not suggest the claimed composition (*id.*).

We do not find these arguments persuasive. "By using the term 'consisting essentially of,' the drafter signals that the invention necessarily includes the listed ingredients and is open to unlisted ingredients that do not

materially affect the basic and novel properties of the invention.” *PPG Indus. Inc. v. Guardian Indus. Corp*, 156 F.3d 1351, 1354, 48 USPQ2d 1351, 1353-54 (Fed. Cir. 1998). Moreover, Appellants bear the burden of establishing that the ingredients present in the prior art composition are excluded by the “consisting essentially of” claim language. *In re De Lajarte*, 337 F.2d 870, 874, 143 USPQ 256, 258 (CCPA 1964).

In the instant case Appellants do not provide, and we do not see, any evidence that the hydrophilic fibers that would be present in a colored version of Benjamin’s absorbent pad would affect the basic and novel properties of the invention. To the contrary, as discussed above, the Specification discloses that Appellants’ litter compositions may contain up to 60% by weight of various supplemental absorbent materials similar to those employed in Benjamin’s fibers, including paper, cellulosic webs, and polymeric fibrous webs (Specification 11:6-21). This suggests that such materials would not affect the basic and novel properties of the claimed invention. We therefore agree with the Examiner that one of ordinary skill would have considered claim 20 obvious over Benjamin and Cowan.

We affirm the rejection of claims 19 and 20. The Appeal Brief provides no separate argument for claims 7-9 and 11-13. These claims therefore fall with claims 19 and 20.

5. OBVIOUSNESS -- CLAIM 10

Claim 10 stands rejected under 35 U.S.C. § 103 as obvious over Benjamin, Cowan, and Ito (Answer 3). The Examiner urges that, although neither Benjamin nor Cowan teaches the use of the dyes of claim 10 in coloring a litter composition, “[i]t would have been obvious to one having

ordinary skill in the art at the time the invention was made to employ a dye as taught by Ito in the litter of Benjamin et al. as modified by Cowan et al. in order to enhance the appearance of the litter” (Final Rejection 5).

Appellants do not argue this ground of rejection in the Appeal Brief, the only reference to claim 10 being that “claims 2-18 stand or fall with claim 1” (Br. 10).

We agree with the Examiner that one of ordinary skill would have considered claim 10 obvious over the cited references. Claim 10 requires the claimed litter composition to have a colorant agent which may be a quinoline dye. Ito discloses that animal litter material can be pigmented with a number of coloring agents, including “quinoline blue . . . [and] quinoline green” (Ito col. 3, ll. 3-10).

As discussed above, we agree with the Examiner that one of ordinary skill, recognizing from Cowan that dyes and pigments are conventionally used in litter compositions, would have considered it obvious to enhance the appearance of Benjamin’s particle-containing absorbent pad by applying dyes or pigments to it, such as the dyes disclosed by Ito. We therefore affirm the Examiner’s obviousness rejection of claim 10.

6. OBVIOUSNESS -- CLAIMS 15 AND 16

Claims 15 and 16 stand rejected under 35 U.S.C. § 103 as obvious over Benjamin and Stanislawski (Answer 3). The Examiner urges that “[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to employ an encapsulated fragrance as taught by Stanislawski et al. in the litter of Benjamin et al. in order to provide the litter with a pleasant odor” (Final Rejection 5).

Appellants do not argue this ground of rejection in the Appeal Brief, the only reference to claims 15 and 16 being that “claims 2-18 stand or fall with claim 1” (Br. 10).

Claims 15 and 16 together require the claimed litter composition to have an encapsulated fragrance. Stanislawski discloses that, in animal litters, “fragrances . . . to mask odors can be used. The fragrances can be uncoated . . . or encapsulated” (Stanislawski col. 6, ll. 23-25). We agree with the Examiner that one of ordinary skill, recognizing that Benjamin’s absorbent material was to be used in a litter box, would have also recognized the desirability of including Stanislawski’s odor-masking encapsulated fragrance in the absorbent material. We therefore affirm the obviousness rejection of claims 15 and 16.

SUMMARY

We affirm the Examiner’s rejection of claims 1-6, 14, 17, and 18 as obvious over Benjamin.

We affirm the Examiner’s rejection of claims 7-9, 11-13, 19, and 20 as obvious over Benjamin and Cowan.

We affirm the Examiner’s rejection of claim 10 as obvious over Benjamin, Cowan, and Ito.

We affirm the Examiner’s rejection of claims 15 and 16 as obvious over Benjamin and Stanislawski.

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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

Ssc

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