UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LIN WANG and
THOMAS A. WIESNER

Appeal 2006-1749
Application 10/300,205
Technology Center 3600

Decided: October 27, 2006

Before GARRIS, PAK and KRATZ, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 1, 16, 33, 50, 59, 69, 113-119, 121-133, 135-149, 151-157, 159-162, 164-166, 168-171, 173-182 and 184, the only claims pending in this application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

We AFFIRM.

INTRODUCTION

The claims are directed to animal litter, a method of making the animal litter and a method of using the animal litter. Claim 50 is illustrative:

> 50. An animal litter comprising:
>
> a mixture of at least two discrete sorbents selected from the group consisting of a plant meal, grain, germ, citrus residue, and mixtures thereof, and
>
> a polysaccharide cohesiveness agent;
>
> said animal litter being in the form of discrete plural compacted particles which tend to agglomerate when wetted, said polysaccharide cohesiveness agent being present in said litter in an amount effective to enhance the intraparticle cohesion of said particles.

The Examiner relies on the following prior art references as evidence of unpatentability:

Greenberg	US 4,638,763	Jan. 27, 1987
Ducharme	US 4,883,021	Nov. 28, 1989
Goss	US 6,089,189	Jul. 18, 2000
Kent	US 6,098,569	Aug. 8, 2000

The rejections as presented by the Examiner are as follows:

1. Claims 1, 16, 33, 50, 59, 69, 113-118, 121-123, 126-132, 135-137, 140-148, 151-153, 156, 157, 159-161, 164-166, 168-170, 173-181, and 184 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kent in view of Goss.
2. Claims 119, 133, 149, 162, 171 and 182 are rejected under 35 U.S.C § 103(a) as unpatentable over Kent as modified by Goss in further view of Ducharme.

3. Claims 124, 125, 138, 139, 154 and 155 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kent as modified by Goss in further view of Greenberg.

Rather than reiterate the respective positions advocated by the Appellants and by the Examiner concerning these rejections, we refer to the Brief and Reply Brief and to the Answer respectively for a complete exposition thereof.

OPINION

Appellants do not separately argue the claims in their Brief or Reply Brief. Rather, Appellants solely argue the product limitations in the claims. Claim 50, a product claim, appears to be the broadest claim on appeal. The other independent product, method of making and the method of using claims contain limitations similar to those in product claim 50. Accordingly, we choose claim 50 as the representative claim on which to render our decision.

We also note that Appellants provide no arguments regarding either the Ducharme or Greenberg patents. Rather, Appellants limit their arguments to the combination of the Kent patent with the Goss patent. In response to Appellants' arguments, we limit our discussion below to the combination of Kent with Goss.

Claim 50 recites an animal litter including "a mixture of at least two discrete sorbents selected from the group consisting of a plant meal, grain germ, citrus residue, and mixtures thereof", "a polysaccharide cohesiveness agent", the "animal litter being in the form of discrete plural compacted particles which tend to agglomerate when wetted", and the "polysaccharide

cohesiveness agent being present in said litter in an amount effective to enhance the intraparticle cohesion of the particles."

The Examiner rejected claim 50 under § 103(a) over Kent in view of Goss (Answer 3). The Examiner stated:

> Kent et al. disclose an animal litter comprising a first sorbent being selected from corn germ (col. 3, lines 17-43); a discrete second sorbent selected from other grains (col. 3, lines 17-43); a polysaccharide cohesive agent (col. 4, lines 10-19); said litter being in the form of discrete plural compacted particles which tend to agglomerate when wetted , said polysaccharide cohesiveness agent being present in said litter in an amount effective to enhance intraparticle cohesion of said particles (Final Office Action 3-4).

The Examiner stated that Kent is silent about a citrus residue as the second sorbent (Final Office Action 4). However, the Examiner found that Goss taught an animal litter that includes citrus residue (Final Office Action 4). Based on the disclosure of Kent and Goss, the Examiner concluded that it would have been obvious "to employ a citrus residue as taught by Goss et al. as the preferred second sorbent in the litter of Kent et al. in order to enhance clumping and smell of the litter" (Final Office Action 4).

Appellants argue lack of motivation to combine Goss with Kent (Br. 4-5). In that regard, Appellants argue that one of ordinary skill in the art "would be disinclined to employ the citrus material of Goss in the litter of Kent, in light of the teachings in Goss that the citrus residue is detrimental to clumping" (Br. 5). Appellants argue that Goss teaches citrus residue impedes clumping and also that even adhesively coated citrus residue does not clump (Br. 5). Appellants conclude that their invention, which achieves a clumpable litter using citrus residue, is a "surprising departure from the prior art" (Br. 5).

The Examiner contends that Goss provides the motivation for the combination with Kent: to enhance clumping and smell of the litter (Answer 4). The Examiner also contends that it is "notoriously well known" in the animal litter art that the litter "contains some sort of fragrance or odorizer, such as the citrus residue of Goss et al., to enhance the smell of the litter and decrease the smell of the animal waste" (Answer 4).

Moreover, the Examiner states that Goss does not disclose citrus residue as being detrimental to clumping (Answer 5). The Examiner indicates that Goss teaches forming a "clumpable" litter citing column 1, line 40 (Answer 5). The Examiner's position appears to be that if Goss discloses using citrus residue as the sorbent material for a "clumpable" litter, then the litter produced using the citrus residue must be "clumpable" (Answer 5). The Examiner further argues that citrus residue is a well known fragrance to mask animal waste smell and not to impede clumping (Answer 5). The Examiner concludes that adding citrus residue to Kent's invention would not have altered (i.e., detrimentally) Kent's clumpable litter because the citrus residue merely functions as "an odor eliminator not a clumping impeder" (Answer 5).

Appellants respond that Goss does not "teach or suggest that the citrus-based cellulose can reduce odors of animal waste" (Reply Br. 2). Appellants argue that Goss uses the citrus residue as only a cellulose source not as a deodorizer (Reply Br. 2). Also, Appellants state that because Goss' cellulose is encapsulated in many layers of adhesive it is not clear that the citrus residue-based cellulosic substrate can perform any odorizing function (Reply Br. 2-3).

Appellants further argue that "Goss and Kent cannot be combined to arrive at the present invention" (Reply Br. 3). Goss uses an inert cellulose substrate which is treated with multiple adhesives to produce a clumpable litter, whereas Kent uses a grain-based substrate which itself tends to clump without the adhesive layers (Reply Br. 1, 3). Appellants also allege that one of ordinary skill would not be motivated to specifically select citrus pulp from the long list of materials Goss discloses (Reply Br. 3). Moreover, Appellants argue Goss' disclosure, that "fibril" formation on the surface of the cellulosic substrates is detrimental to clumping, is "antithetical" to the clumpable litter teachings of Kent (Reply Br. 3). Based on these arguments, Appellants conclude that there is no motivation to combine Goss with Kent (Reply Br. 3).

We agree with the Examiner's ultimate determination that claim 50 is unpatentable over Kent in view of Goss.

Kent discloses an animal litter made of a grain germ sorbent, preferably corn germ (Kent, col. 3, ll. 23-26), although any "suitable part of the grain" may be used to derive the sorbent (Kent, col. 3, ll. 21-22). The animal litter preferably contains a "cohesiveness agent to enhance the cohesiveness of the animal litter granules" (Kent, col. 4, ll. 1-4). The "cohesiveness agent" is a polysaccharide and is used to "effect" the intraparticle adhesion/cohesion of the granules (Kent, col. 4, ll. 13-14, 22-24). The polysaccharide adhesive may be a starch (Kent, col. 4, ll. 16).

Goss discloses an animal litter made of cellulosic granule sorbent (Goss, col. 2, ll. 58-67, col. 3, ll. 1-6) with a polysaccharide adhesive and a clumping agent (Goss, col. 3, ll. 10-11, 43-46). The cellulosic granule may

be produced from citrus pulp or grain (Goss, col. 2, ll. 63-64). The polysaccharide adhesive may be a starch (Goss, col. 3, ll. 8).

Generally, it is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition which is to be used for the very same purpose. *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (C.C.P.A. 1980).

Applying the *Kerkhoven* holding to the facts of the present appeal we find the following: (1) both Kent and Goss disclose animal litter compositions having sorbent material (i.e., grain material such as grain germ in Kent and cellulosic granule such as grain or citrus pulp in Goss); (2) each composition of Kent and Goss is used for the same purpose, namely, absorbing animal waste; and (3) the combination of Goss with Kent would produce a third composition to be used for the very same purpose (i.e., absorbing animal waste). From the foregoing, it appears that it would have been obvious at the time the invention was made to have combined Goss' citrus pulp-based cellulosic granule animal litter with Kent's grain-based animal litter. As the *Kerkhoven* court explained "the idea of combining them [i.e., the two compositions] flows logically from their having been individually taught in the prior art." *Id*.

Appellants argue that Goss teaches away from combining his citrus pulp-based sorbent with Kent's animal litter. Appellants indicate that Goss' disclosure (i.e., of fibril formation on the cellulosic granules leading to non-clumping behavior in the cellulosic granules) teaches away from combining his citrus pulp-based sorbent with Kent's grain germ sorbent (Reply Br. 3).

We do not agree.

While Goss discloses fibril formation as being detrimental to clumping (Goss, col. 4, ll. 40-43), Goss also discloses a solution to the fibril interaction-non-clumping problem. Goss places a water soluble adhesive on the cellulosic granules to flatten the fibrils and thereby enhance the clumping effect (Goss, col. 2, ll. 5-11, 15-21). By using the adhesive coating, Goss teaches forming a clumpable animal litter (Goss, col. 1, l. 40).

Using Goss' solution to the fibril problem, the combination of Goss' citrus pulp-based cellulosic granules with Kent's animal litter would have included treating the cellulosic granules to make them clumpable as taught by Goss.

We also find a reasonable expectation of success in combining Goss' citrus pulp-based cellulosic granule sorbent with Kent's grain-germ based sorbent animal litter. Both Goss and Kent use common sorbents and adhesives. Kent uses a grain-based sorbent (Kent, col. 3, ll. 17-28) with a polysaccharide "cohesiveness agent" (Kent, col. 4, ll. 13-14). Goss may use grain-based sorbents or any of the listed equivalent sorbents such as citrus pulp (Goss, col. 2, l. 61) with a polysaccharide adhesive (Goss, col. 3, ll. 10-11). The similarities of Kent's and Goss' litter compositions, particularly the polysaccharides thereof, provide a reasonable expectation that the combination of the two sorbents would successfully function as a clumpable animal litter.

We are not persuaded by Appellants' argument that one of ordinary skill would not have been motivated to pick citrus pulp as the cellulose source from Goss' "long list" of possible cellulose sources. Goss' list of possible cellulose sources is not a "long list" as characterized by Appellants. The list of possible cellulose source includes only approximately sixteen

(16) exemplified sources. Regardless, an artisan would have been motivated to select any member of this list, including citrus pulp, based on Goss' teaching that the enumerated cellulose sources are suitable adsorbents in animal litter. *Merck & Co., Inc. v. Biocraft Laboratories, Inc.*, 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989).

We affirm all the § 103(a) rejections on appeal.

CONCLUSION

In summary, we have affirmed the § 103(a) rejection of claims 1, 16, 33, 50, 59, 69, 113-118, 121-123, 126-132, 135-137, 140-148, 151-153, 156, 157, 159-161, 164-166, 168-170, 173-181 and 184 as being unpatentable over Kent in view of Goss.

We have affirmed the § 103(a) rejection of claims 119, 133, 149, 162, 171 and 182 as being unpatentable over Kent as modified by Goss in further view of Ducharme.

We have affirmed the § 103(a) rejection of claims 124, 125, 138, 139, 154 and 155 as being unpatentable over Kent as modified by Goss in further view of Greenberg.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. 1.136(a)(1)(iv)(2004).

AFFIRMED

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