

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

OIL-DRI CORPORATION OF AMERICA,)	
)	
Plaintiff,)	
)	
vs.)	Case No. 15 C 1067
)	
NESTLÉ PURINA PETCARE COMPANY,)	
)	
Defendant.)	

MEMORANDUM OPINION AND ORDER

MATTHEW F. KENNELLY, District Judge:

In February 2015, Oil-Dri Corporation sued Nestlé Purina Petcare Company for patent infringement. Both companies manufacture cat litter. Oil-Dri owns a patent for "clumping animal litter," which it alleges Nestlé Purina has infringed. Specifically, it alleges literal infringement of two of the patent's independent claims—1 and 30—and related dependent claims. Nestlé Purina asserts several affirmative defenses, including invalidity and equitable estoppel.

Oil-Dri has moved for summary judgment on its claims of infringement and on all of Nestlé Purina's affirmative defenses. Nestlé Purina has cross-moved for summary judgment of non-infringement and on one aspect of its invalidity defense. For the reasons below, the Court grants each side's motion for summary judgment in part and denies each in part.

Background

A. Factual background

The following facts are undisputed except where otherwise noted. Oil-Dri, the manufacturer of Cat's Pride brand cat litters, owns U.S. Patent No. 5,975,019 (the '019 patent), entitled "clumping animal litter." The patent teaches an animal litter that employs "the interparticle interaction of swelling clay, such as sodium bentonite, in combination with a non-swelling clay material" to produce a litter that quickly and effectively clumps when exposed to moisture such as that in animal waste. See '019 Patent, Ex. A to Pl.'s Mot. for Summ. J., dkt. no. 602-2, at Abstract. Specifically, the patent's invention exploits a purportedly innovative clumping synergy that results from pairing relatively smaller particles of swelling clay materials with relatively larger non-swelling clay particles. The synergy allows the manufacturer to use proportionally less swelling clay material while still achieving a "a good clumping performance" that "heretofore was not readily attainable." *Id.* at 1:50-54. The upshot: the clumping animal litter described in the '019 patent uses less of the pricier and heavier swelling clay material than its predecessors while still achieving desirable clumping qualities.

Nestlé Purina manufactures a wide range of animal litter products branded under the Tidy Cat name. Its products, like Oil-Dri's, take advantage of interactions between swelling and non-swelling clay materials to create a clumping reaction when exposed to moisture. Where the parties disagree, of course, is whether the Nestlé Purina products fall within the legal monopoly protected by the '019 patent. Nestlé Purina asserts that the '019 patent does not cover "engineered" or "composite" litter products like its Tidy Cats litters. An engineered or composite litter is one in which swelling and non-swelling

clays are manufactured into unified physical structures, which the parties call "composite granules," rather than remaining as separate, discrete particles in the final product.

A brief review of Nestlé Purina's manufacturing process helps to clarify this distinction. In contrast to dry-mixing processes like the one Oil-Dri uses, in which dry particles of non-swelling clay are mixed with dry particles of swelling clay, Nestlé Purina employs a wet-mixing process at each of its three litter-manufacturing facilities.¹ It starts with non-swelling clay dust, which is combined with water using an instrument called a pin mixer. At the end of the pin-mixer step, Nestlé Purina has what it calls "wet seeds" or "mudballs"—small chunks containing about seventy percent non-swelling clay and thirty percent water. Next, the wet seeds are fed into a machine called a coater, in which they are blasted with swelling clay dust. Because of the moisture, the swelling clay dust accretes to the wet seed, creating granules containing both non-swelling clay (the core) and swelling clay (the exterior). These composite granules are then fed into a dryer where they are, unsurprisingly, dried.

Although these basic facts are undisputed, there are a couple of disagreements about specific facets of Nestlé Purina's manufacturing process that will become relevant later. For instance, the parties disagree about whether Nestlé Purina predetermines the size of the particles it uses in its manufacturing process within the meaning of the '019 patent. Because these disputes make little sense without context, the Court reserves

¹ The three facilities are in Bloomfield, Missouri; King William, Virginia; and Maricopa, California. The facilities locally source some of their materials. This distinction will be relevant later, as Oil-Dri's motion for summary judgment does not apply to products manufactured at Nestlé Purina's Maricopa facility.

discussion about them until later in the order.

B. Procedural history

Oil-Dri filed this lawsuit in February 2015. Approximately two weeks later, Nestlé Purina filed a petition for inter partes review (IPR) before the Patent Trial and Appeal Board, alleging that the allegedly infringed claims were invalid.² The present lawsuit was temporarily stayed pending completion of the IPR process. IPR ended in June 2015 with a final written decision from the Board in which it concluded none of the disputed claims in the '019 patent were invalid. Purina appealed that decision to the Federal Circuit. In June 2018, the Federal Circuit remanded the dispute, on limited grounds, to the Board, where it remains pending. *See Nestle Purina Petcare Co. v. Oil-Dri Corp. of Am.*, No. 2015-1744, 2018 WL 4087894 (Fed. Cir. June 11, 2018).

In the meantime, Judge Amy St. Eve, to whom this case was then assigned, lifted the stay on this litigation in August 2016. The parties proceeded with discovery. Oil-Dri tendered its final infringement contentions as required by Local Patent Rule 2.2(d) in March 2018, and Nestlé Purina served its final invalidity and unenforceability contentions in July of that year. The case was reassigned to the undersigned judge in May 2018, and the parties proceeded to claim construction. After briefing and oral argument, the Court issued its claim construction order on September 2018. *See Oil-Dri Corp. of Am. v. Nestlé Purina Petcare Co.*, No. 15 C 1067, 2018 WL 4216627 (N.D.

² IPR is a process created by the Leahy-Smith America Invents Act, codified at 35 U.S.C. §§ 311-19, under which parties other than the patent holder can petition the Patent Trial and Appeal Board to determine whether claims in a patent are invalid. It is "intended to be quick and cost effective alternative[] to litigation for third parties to challenge the patentability of issued claims." *Wi-Fi One, LLC v. Broadcom Corp.*, 787 F.3d 1364, 1368 (Fed. Cir. 2018).

III. Sept. 5, 2018).

In November 2018, Oil-Dri filed a motion to amend its final infringement contentions. It sought to add infringement contentions under the doctrine of equivalents, a previous version of which had been struck by Judge St. Eve for being insufficiently specific to satisfy Local Patent Rule 2.3. The Court denied the motion, noting that such an amendment was available under Local Patent Rule 3.4 only if Oil-Dri could show good cause, that such an amendment would not unfairly prejudice opposing parties, and that the motion to amend had been made promptly upon discovery of its basis. The Court concluded that Oil-Dri had met none of Rule 3.4's requirements.

Soon after it filed its motion to amend, Oil-Dri filed its motion for summary judgment. In December 2018, Nestlé Purina filed its cross-motion for summary judgment.

C. Disputed claims

The '019 patent, which issued on November 2, 1999, includes three independent claims and thirty-two dependent claims. This suit involves independent claims 1 and 30, as well as dependent claims 2, 4, 5, 6, 7, 9, 10, and 32. Mirroring the parties' arguments, the vast majority of the Court's discussion here focuses on the disputed independent claims.³

Claim 1 of the patent teaches:

³ Indeed, neither party substantively engages Oil-Dri's infringement contentions based on the '019 patent's dependent claims separately from discussions of the corresponding independent claims. For the purpose of this motion, therefore, the Court treats the disputed dependent claims as fully derivative of the corresponding disputed independent claims discussed. See *Wahpeton Canvas Co. v. Frontier, Inc.*, 870 F.2d 1536, 1553 (Fed. Cir. 1989) (noting that "dependent claims cannot be found infringed unless the claims from which they depend have been found to have been infringed").

1. A clumping animal litter comprising:
 - a. a particulate non-swelling clay material having a predetermined mean particle size not greater than about 4 millimeters; and
 - b. a particulate swelling clay having a predetermined mean particle size no greater than about 2 millimeters, wherein the mean particle size of the non-swelling clay material is greater than the mean particle size of the swelling clay.

'019 Patent, Ex. A to Pl.'s Mot. for Summ. J., dkt. no. 602-2, at 9:37-46. In claim 30, the patent also discloses a method for producing the invention:

A method for making a clumping animal litter comprising the steps of:

- a. combining a particulate non-swelling clay material with a suitable particulate swelling clay to form a composition wherein the mean particle size of the particulate non-swelling clay material is greater than the mean particle size of the particulate swelling clay;
- b. mixing the composition to effect a substantially uniform distribution of the two materials; [and]
- c. packaging a quantity of the mixed composition.

Id. at 11:3-12.

The Court adopted the following constructions of the claims' disputed terms under *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 387-88 (1996):

Term	Adopted construction
"Particulate"	Composed of separate and discrete particles
"Predetermined"	Decided upon in advance
"Mean particle size"	The average of a representative sample of particle sizes or groupings of particle sizes
"Suitable" as it appears in the phrase "combining a particulate non-swelling clay material with a <i>suitable</i> particulate swelling clay"	Acceptable, satisfactory, or fitting
"Composition" as it appears in the phrase " <i>composition</i> wherein the mean particle	A thing composed of various elements

size of the particulate non-swelling clay material is greater than the mean particle size of the particulate swelling clay"	
"Mix" as it appears in the phrases " <i>mixing</i> the composition to effect a substantially uniform distribution of the two materials" and " <i>mixed</i> composition"	Combined or blended into one mass
"Clumping animal litter"	An animal litter with forms a clump when wetted that has a firmness of sufficient structural integrity to withstand mechanical separation from the unwetted litter for disposal without breaking or falling apart
"Clay" and "clay material"	Low bulk density sorptive material composed primarily of layered hydrous silicate minerals (phyllosilicate minerals)

Oil-Dri Corp., 2018 WL 4216627, at *4-18.

Discussion

The infringement analysis has two steps. "First, the court determines the scope and meaning of the patent claims asserted. [Second,] the properly construed claims are compared to the allegedly infringing device." *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc) (citations omitted). These two steps are not always strictly sequential, however, and "[d]istrict courts may engage in a rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves." *Jack Guttman, Inc. v. Kopykake Enters., Inc.*, 302 F.3d 1353, 1361 (Fed. Cir. 2002). Having previously construed the claims under *Markman*, the parties' motions for summary judgment focus on the second step of the infringement analysis, which "requires a determination [whether] every claim limitation or its equivalent can be found in the accused device." *PIN/NIP, Inc. v. Platte Chem. Co.*, 304 F.3d 1235, 1243 (Fed. Cir. 2002).

Summary judgment is appropriate where a "movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). A genuine issue of material fact exists "if the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). In making this determination, all "facts must be viewed in the light most favorable to the nonmoving party." *Scott v. Harris*, 550 U.S. 372, 380 (2007). Where a movant seeks summary judgment on a claim on which it ultimately bears the burden of proof, "it must lay out the elements of the claim, cite the facts which it believes satisfies these elements, and demonstrate why the record is so one-sided as to rule out the prospect of a finding in favor of the non-movant on the claim." *Hotel 71 Mezz Lender LLC v. Nat'l Ret. Fund*, 778 F.3d 593, 601 (7th Cir. 2015). Cross-motions for summary judgment are no exception to these general principles. The Court "take[s] the motions one at a time and then, as usual, construe[s] all facts and draw[s] all reasonable inferences in favor of the non-moving party." *Steimel v. Wernert*, 823 F.3d 902, 910 (7th Cir. 2016).

Oil-Dri seeks summary judgment on its literal infringement claims involving claims 1 and 30⁴ and on Nestlé Purina's invalidity and equitable estoppel defenses. Nestlé Purina's cross-motion for summary judgment is somewhat more limited. It requests summary judgment of non-infringement regarding the disputed claims. But on its own affirmative defenses, Nestlé Purina seeks summary judgment only regarding the

⁴ Oil-Dri also initially requested summary judgment on its doctrine of equivalents claims involving the litter products manufactured at Nestlé Purina's Maricopa facility. It withdrew that portion of its motion in light of the Court's ruling denying its motion to amend its final infringement contentions. See Pl.'s Reply Br., dkt. no. 631, at 1 n.1.

priority date to which the accused products are entitled for the purposes of invalidity analysis.

A. Claim 1

Claim 1 teaches a "clumping animal litter comprising" particles of swelling and non-swelling clay each having "predetermined mean particle size[s]" reflecting the innovative physical relationship described in the specification. See '019 Patent, Ex. A to Pl.'s Mot. for Summ. J., dkt. no. 602-2, at 9:37-46.

1. Literal infringement

Both parties have moved for summary judgment on Oil-Dri's claim for literal infringement regarding claim 1. "Literal infringement exists when every limitation recited in the claim is found in the accused device." *Akzo Nobel Coatings, Inc. v. Dow Chem. Co.*, 811 F.3d 1334, 1341 (Fed. Cir. 2016). To prevail, therefore, Nestlé Purina, the accused infringer, must show that no reasonable jury could find every limitation of a claim to be present in the accused product. Oil-Dri, on the other hand, must demonstrate that the record is such that no reasonable jury could find that any limitation of the claim is not met by the accused product.

The core of the literal infringement dispute regarding claim 1 rests on when in the manufacturing process the allegedly infringing products must satisfy the claim's terms. Specifically, the parties disagree about whether the limitations set out in claim 1 ought to be read to describe only a finished product (which the Court will call the "composition" argument) or may be interpreted to describe the ingredients used to make the clumping animal litter described in the claim (the "ingredients" argument). That distinction is significant: if the claim is read to describe only a finished product, Oil-Dri's case for

literal infringement on claim 1 against Nestlé Purina's accused engineered litter products is weaker, because Nestlé Purina's finished composite granules do not appear to consist of "particulate" swelling and non-swelling clays within the controlling construction of that term.

The parties also dispute whether, as a factual matter, the inputs to Nestlé Purina's products satisfy the "predetermined" element of claim 1.

For the reasons described below, the Court concludes that both Oil-Dri's motion for summary judgment and Nestlé Purina's cross-motion for summary judgment must be denied.

a. Composition versus ingredients

Nestlé Purina argues that "infringement must be based on the final clumping animal litters, not their starting ingredients." Def.'s Reply Br., dkt. no. 643, at 5. It relies on *Exxon Chemical Patents, Inc. v. Lubrizol Corp.*, 64 F.3d 1553 (Fed. Cir. 1995), *PIN/NIP, Inc. v. Platte Chemical Co*, 304 F.3d at 1235, and *Mars, Inc. v. H.J. Heinz Co., L.P.*, 377 F.3d 1369 (Fed. Cir. 2004), to support the assertion. Nestlé Purina's argument puts significant weight on the preamble to claim 1, which describes "[a] clumping animal litter comprising" particulate swelling and non-swelling clay. It asserts that this short phrase limits the claim's protection to only the final litter product that exists *after* the ingredients are combined—a product, in Nestlé Purina's case, in which swelling and non-swelling clay particles are no longer separate and distinct as required by the controlling claim construction.

Nestlé Purina's proposed reading of claim 1 misapplies the law. In *Exxon*, the disputed claim recited "[a] lubricating oil composition. . . ." *Exxon*, 64 F.3d at 1556. In

PIN/NIP, the relevant claim taught "[a] composition adapted for inhibiting sprout formation on tubers during storage" *PIN/NIP*, 304 F.3d at 1238. And, after thoroughly reviewing the claims, specifications, and prosecution histories of the two patents, the court in both cases emphasized the importance of their claims' use of the word "composition." See *Id.* at 1244 ("The term 'composition' in chemistry is well-established."); *Exxon*, 64 F.3d at 1556-58. In both cases, the court concluded that because the drafters claimed a "composition," they were entitled to a patent monopoly over only a product in which the enumerated ingredients continued to exist after "the moment the ingredients are mixed together" to create a composition. *Exxon*, 64 F.3d at 1558; see also *PIN/NIP*, 304 F.3d at 1245. The Federal Circuit came to a similar conclusion in *Mars*, when it was asked to construe the term "mixture" in the phrase "containing a mixture of lipid and solid ingredients." *Mars*, 377 F.3d at 1372-73.

Here, in contrast, claim 1 does not describe a "composition" or "mixture." Instead, it teaches "[a] clumping animal litter comprising" two specific ingredients with specifically defined physical characteristics. Neither the claim nor the rest of the specification suggest that the word "comprising" would limit the claim to the final composition. After careful review, the Court concludes that the Federal Circuit's guidance in *Norian Corp. v. Stryker Corp.*, 432 F.3d 1356 (Fed. Cir. 2005), is controlling. There, the disputed claim taught "[a] kit for preparing a calcium phosphate mineral, said kit consisting of" two ingredients, the second of which was "a solution consisting of water and a sodium phosphate." *Id.* at 1357. The Federal Circuit concluded that, given its context, the "solution" in the claim was defined "in terms of the components put into it," and it enforced that limitation as written. *Id.* at 1362.

Like the solution in *Norian Corp.*, claim 1, rather than using words like "composition" or "mixture" to signal that the Court should look to the final product rather than to its constituent parts, describes a clumping animal litter in terms of its ingredients. The patentee chose to describe the resulting product in terms of its ingredients rather than the final composition, as was its prerogative when drafting the patent. See *Allergan, Inc. v. Sandoz Inc.*, No. 6:11-cv-441, 2013 WL 139350, at *5 (E.D. Tex. Jan. 10, 2013) ("Plaintiff was allowed to describe the resulting aqueous solution in terms of its ingredient parts."). Contrary to *Norian*, Nestlé Purina now asks the Court to rewrite claim 1 to include language analogous to that at issue in *Exxon* and *PIN/NIP*. It would be inappropriate for the Court to do so.

Although the claim's language alone is dispositive, the Court's conclusion is reinforced by two additional considerations: the state of the art when the patent issued and the other terms in claim 1. On the first point, the evidence reflects that a person of ordinary skill in the art of clumping animal litters would have, in 1999, been aware of the emergence of engineered litters made up of composite granules. For instance, Nestlé Purina itself has disclosed an invention memo in which it described such a product. See Invention Memo, Ex. 34 to Def.'s Cross-Mot. for Summ. J., dkt. no. 625-39, at 5. A person of ordinary skill in the art therefore likely would have read the "clumping animal litter comprising" particulate swell and non-swelling claim to include composite granules. *Cf. Allergan*, 2013 WL 139350, at *5 (emphasizing what a person of ordinary skill in the art would make of a composition-versus-ingredients dispute).

Finally, use of the word "predetermined" in claim 1 resolves any remaining concerns that the term "particulate" might be short-changed by this reading.

Specifically, the claim's description of swelling and non-swelling particles having "predetermined mean particle size[s]" suggests that the particulate nature of the ingredients need not necessarily endure through their combination in order to satisfy the claims terms, so long as they were particulates before they were combined.

For the reasons stated here, the Court concludes that claim 1 describes a clumping animal litter in terms of its ingredients. See *Norian Corp.*, 435 F.3d at 1362. Therefore, a litter comprising those ingredients—particulate swelling and non-swelling clay of specific, predetermined relative sizes—may infringe the patent even if the swelling and non-swelling particles are no longer separate and discrete after they are combined.

b. Predetermined mean particle sizes

Having resolved the composition-versus-ingredients dispute in favor of the words actually contained in claim 1, the Court turns next to a factual dispute: does Nestlé Purina predetermine the mean particle sizes of the swelling and non-swelling clays used in its manufacturing process? Each party seeks summary judgment on this point. Again, the controlling construction of the term "predetermined" is "decided upon in advance." *Oil-Dri Corp.*, 2018 WL 4216627, at *2. As the Court previously made clear, it does not mean "actually measured," as Nestlé Purina proposed during claim construction. *Id.* "Mean particle size" is defined as "the average of a representative sample of particle sizes or groupings of particle sizes." *Id.* at *3.

Oil-Dri contends that Nestlé Purina predetermines the sizes of both swelling and non-swelling clay particles that it uses in its manufacturing process. Specifically, it points to Nathan Huck's testimony that the company distributes material specifications

for swelling and non-swelling clay to its suppliers that specifically delineate the predetermined—i.e., decided upon in advance—particle sizes required for the company's manufacturing process. See Huck Dep., Ex. X to Pl.'s Mot. for Summ. J., dkt. no. 609-27, at 65-66. Huck also testified that Nestlé Purina conducts particle-size-related monitoring of the swelling and non-swelling clay used in its manufacturing processes. *Id.* Likewise, Oil-Dri's expert witness testified that, based on the size specifications to which Huck testified, the mean particle sizes of the non-swelling clay particles used in the manufacturing process were larger than the swelling particles as required by claim 1. See Pl.'s LR 56.1 Stat., dkt. no. 603, ¶ 40.

Nestlé Purina, on the other hand, contends that Huck's testimony was taken out of context, and that its sizing specifications provide insufficient information from which to calculate mean particle size for the clays it uses. Def.'s Resp. to Pl.'s LR 56.1 Stat., dkt. no. 638-136, ¶ 40. That is, Nestlé Purina argues that evidence that swelling and non-swelling particles used in its manufacturing process were smaller than a set size provides no basis for determining the *mean* particle size, because the sieve sizes used represent only an upper bound on particle size and provide no basis for calculating a lower bound. Nestlé Purina cites expert testimony from G. Robert Goss, Dennis Jenkins, and Chett Boxley, each of whom notes the need for sieve data that "straddle the mean particle size" in order to make an accurate mean particle size measurement. See Goss Dep., Ex. 3 to Def.'s Cross-Mot. for Summ. J., dkt. no. 628-6, at 222:2-224:21; Jenkins Rebuttal Report, Ex. 19 to Def.'s Cross-Mot. for Summ. J. dkt. no. 628-22, at ¶¶ 116-30; Boxley Aff., Ex. PPP to Pl.'s Reply Br., dkt. no. 632-23, ¶ 62. Nestlé Purina also rehashes its composition-versus-ingredients arguments under this rubric,

contending that no discernable particulate swelling or non-swelling clay exists after the combination process that leads to the composite granules of the engineered litter.

The Court concludes that there is evidence in the record supporting each party's contention and that the settlement of the remaining material factual disputes must be left to the jury at trial. Turning first to Oil-Dri's motion for summary judgment, the Court draws all reasonable inferences in Nestlé Purina's favor. Based on the record before the Court, a reasonable jury could conclude that there is insufficient evidence that Nestlé Purina predetermined—that is, decided upon in advance—the mean particle sizes of the swelling and non-swelling materials used in its products such that it literally infringed claim 1. For instance, the deposition testimony of Goss, Jenkins, and Boxley provides a basis for a finding that Nestlé Purina did not decide upon the mean particle sizes of the swelling and non-swelling clays used in the accused products in advance. Oil-Dri thus is not entitled to summary judgment on this point.

Likewise, drawing all reasonable inferences in Oil-Dri's favor in assessing Nestlé Purina's motion cross-motion for summary judgment, the Court concludes that a reasonable jury could find for Oil-Dri. Although the process by which Nestlé Purina ensured swelling and non-swelling clay particles used in its manufacturing process met its size specifications may not have allowed precise mean particle size calculations, a reasonable jury could nevertheless determine based on, among other evidence, Huck's testimony, that Nestlé Purina decided in advance to use relatively smaller swelling clay particles and relatively larger non-swelling clay particles in its manufacturing process, as required by the '019 patent. Thus Nestlé Purina is not entitled to summary judgment on this point either.

c. Maricopa products

There is one further wrinkle to the cross-motion for summary judgment related to the accused products manufactured at Nestlé Purina's Maricopa, California facility. In short, the Court's construction of the term "clay material" as it appears in the claim excluded the non-swelling material locally sourced and used by the Maricopa facility. Although Oil-Dri initially sought summary judgment regarding those products under its proposed doctrine-of-equivalents theory, it withdrew that argument after this Court denied its motion to amend its infringement contentions. See Pl.'s Reply Br., dkt. no. 631, at 1 n.1. It then conceded that it "cannot prove infringement" on the Maricopa products in light of the Court's rulings. Pl.'s LR 56.1 Stat. of Add'l Facts, dkt. no. 632-1, ¶ 1(g). Therefore, to the extent that Nestlé Purina's motion seeks cross-summary judgment of non-infringement regarding the products manufactured at its Maricopa facility, the Court grants the motion.

2. Defenses

Having denied both parties' bids for summary judgment on the question of literal infringement regarding claim 1 of the '019 patent, the Court turns to Nestlé Purina's defenses. Although others were included in its answer, this motion is limited to three defenses⁵: invalidity due to anticipation or obviousness in light of prior art, invalidity for

⁵ Oil-Dri also initially sought summary judgment on Nestlé Purina's waiver, laches, and acquiescence defenses. Nestlé Purina appears to have withdrawn its laches defense in light of the Supreme Court's decision in *SCA Hygiene Products Aktiebolag v. First Quality Baby Products, LLC*, 137 S. Ct. 954 (2017), which foreclosed laches defenses in patent cases brought within the statute of limitations. But Nestlé Purina correctly points out in its response to Oil-Dri's motion for summary judgment that *SCA Hygiene* did not concern acquiescence or unclean hands defenses. In light of Oil-Dri's failure to address those arguments in its reply, its motion for summary judgment is denied regarding the

lack of written description, and equitable estoppel. Oil-Dri has moved for summary judgment on all three defenses. Nestlé Purina opposes summary judgment on all of its defenses but limits its cross-motion for summary judgment to the issue of the priority date associated with the accused products as it relates to its invalidity defense.

a. Prior art

The first of Nestlé Purina's affirmative defenses is that the '019 patent is invalid because it was anticipated or rendered obvious by prior art. Specifically, Nestlé Purina argues that four references—(1) the accused Nestlé Purina products, (2) a product developed by Western Aggregates called MoFoam, (3) a product manufactured by Nestlé Purina's predecessor called Kitty Litter Maxx Scoop, and (4) a Japanese patent called Shinohara—constituted prior art sufficient to invalidate the '019 patent. Oil-Dri seeks summary judgment on the invalidity defense as it relates to each prior art reference. Nestlé Purina seeks summary judgment only regarding the priority date to which accused products are entitled. To succeed on the merits, Nestlé Purina will ultimately bear the burden of proving its invalidity contentions by clear and convincing evidence. *See TriMed, Inc. v. Stryker Corp.*, 608 F.3d 1333, 1340 (Fed. Cir. 2010).

i. Accused products

Nestlé Purina contends that the products now accused of infringing the '019 patent actually predate it and thus anticipated the patent's invention, rendering the patent invalid. Oil-Dri argues that the accused products could not have been prior art invalidating the '019 patent. It contends that there is no evidence suggesting that Nestlé

acquiescence and unclean hands defenses to the extent that it was not forfeited or withdrawn.

Purina's early efforts at creating composite granules captured the synergy between relatively larger non-swelling clay particles and relatively smaller swelling clay particles described in the '019 patent or, even if they did, that Nestlé Purina appreciated that synergy. The Federal Circuit has held that, "[t]o establish prior invention, the party asserting it must prove that it appreciated what it had made." *Teva Pharm. Indus. Ltd. v. AstraZeneca Pharm. LP*, 661 F.3d 1378, 1384 (Fed. Cir. 2011). That is, for the purposes of establishing priority under patent law, "[t]he date of conception of a prior inventor's invention is the date the inventor first appreciated the fact of what he made." *Invitrogen Corp. v. Clontech Labs., Inc.*, 429 F.3d 1052, 1063 (Fed. Cir. 2005).

To win on summary judgment, Oil-Dri must demonstrate that no reasonable jury could conclude by clear and convincing evidence that Nestlé Purina created the invention described in the '019 patent before Oil-Dri and appreciated what it had made. At this point, Oil-Dri has failed to make such a showing. Drawing reasonable inferences in favor of the non-moving party, there is evidence from which a reasonable jury could infer that Nestlé Purina appreciated the synergy between swelling and non-swelling clay particles of certain sizes and sought to exploit that synergy in the accused products. For instance, the invention memo associated with the composite granules includes some discussion of increasing particle sizes of swelling and non-swelling clays variably to achieve better clumping in a composite product. See Invention Memo, Ex. 34 to Def.'s Cross-Mot. for Summ. J., dkt. no. 625-39. Although far from the precision of the '019 patent, this and other evidence provides a basis upon which a reasonable jury could find for Nestlé Purina. Oil-Dri's is therefore not entitled to summary judgment on Nestlé Purina's invalidity defense as it relates to the accused products.

Next, Nestlé Purina seeks summary judgment limited to the priority date of the accused products. It asserts that the record—specifically, the invention memo discussed above—conclusively establishes that the accused products were invented and reduced to practice by February 27, 1997, the date the memo was sent. Oil-Dri disagrees, arguing that the record contains evidence that the invention was abandoned or otherwise ineligible for the February 27 priority date. It points to Nestlé Purina's failure to produce evidence of any efforts to develop the accused products between 1997 and 2000.

The Court concludes that genuine disputes of material fact remain regarding the date of invention of the accused products. That is, a reasonable jury could conclude that the gap in evidence constituted an abandonment or lack of diligence on Nestlé Purina's part in the development of the accused products. Either may be sufficient to undermine Nestlé Purina's priority date assertion. Accordingly, Nestlé Purina is not entitled to summary judgment on that issue.

ii. Western Aggregates' MoFoam

The next invalidity contention concerns a product called MoFoam that was developed by a company called Western Aggregates. Nestlé Purina contends that Oil-Dri disclosed the invention of the '019 patent during the course of a relationship it had with Western to develop MoFoam, a product designed to keep organic clumping agents in cat litter from settling to the bottom of cat litter packages. Because Western reduced the invention to practice, Nestlé Purina contends, the '019 patent's invention was anticipated, and the patent is therefore invalid. See 35 U.S.C. § 102 (2010). Oil-Dri asserts that the record is devoid of evidence that would support a finding of invalidity

and that it is thus entitled to summary judgment on this point.

Again, the Court concludes that summary judgment would be inappropriate because a reasonable jury could find for the non-moving party. Nestlé Purina points to evidence from which a jury could conclude that Oil-Dri communicated the '019 patent's invention to Western and that Western reduced the invention to practice. Furthermore, Nestlé Purina notes that MoFoam met the mean particle size limitations of the '019 patent and worked for its intended purpose, regardless of the stated function for which Western developed the product. Nestlé Purina notes correctly that the prior art inventor "is not required to have framed its prior documentation about its reduction to practice in the exact language given in the claims" in order for that reduction to practice to constitute prior art. *Mycogen Plant Sci. v. Monsanto Co.*, 243 F.3d 1316, 1336 (Fed. Cir. 2001). Oil-Dri, on the other hand, points to evidence that Western abandoned the project and never appreciated the clumping synergy described in the '019 patent.

In light of evidence supporting both parties' contentions, the remaining dispute is for the jury to resolve. Oil-Dri is not entitled to summary judgment on the MoFoam prior art reference.

iii. Kitty Litter Maxx Scoop

Nestlé Purina next contends that litters manufactured by its predecessor and marketed under the brand name Kitty Litter Maxx Scoop constituted invalidating prior art. Oil-Dri contends that there is no evidence that any Maxx Scoop products meeting the limitations of the '019 patent were actually sold in the United States before the '019 patent application was filed. It notes that the record establishes that not all Maxx Scoop products contained the appropriate size proportions to satisfy the '019 patent's

limitations on particulate swelling and non-swelling clays and that there is no direct evidence of those products being sold in the United States. (The only remaining sample of the product referenced in the record was sold in Canada.) Nestlé Purina correctly points out, however, that it need not prove sales under sections 102(a) and (g) of the controlling pre-America Invents Act version of the statute. See 35 U.S.C. § 102 (2010). Indeed, it need only show that the invention "was known or used by others in this country." *Id.* § 102(a). Nevertheless, Oil-Dri argues that it is entitled to summary judgment because Nestlé Purina admitted that the formulation and other information about the Maxx Scoop products were never published and because there is no evidence that Maxx Scoop products were known or used within the United States.

Again, summary judgment is not appropriate at this point because there is record evidence from which a reasonable jury could find for Nestlé Purina. Specifically, one of the Maxx Scoop products' inventors, Phillip Greene, testified that the Maxx Scoop litters with the relevant characteristics were sold in the United States. See Greene Dep., Ex. M to Pl.'s Mot. for Summ. J., dkt. no. 609-16, at 166. Although Greene hesitated to specify an exact date when the products were sold, he also testified that the swelling clay particles in at least some of the Maxx Scoop litters were smaller than the non-swelling clay particles. This testimony constitutes evidence from which a reasonable jury could conclude that at least some of the Maxx Scoop products constituted prior art anticipating the '019 patent.

iv. Shinohara patent

Next, Nestlé Purina contends that the '019 patent was obvious in light of a Japanese patent issued to Shinohara as combined with the Kitty Litter Maxx Scoop

products discussed above. Oil-Dri contends that Nestlé Purina is estopped from raising the Shinohara patent in this litigation because it failed to cite the prior art reference during the IPR proceeding before the Patent Trial and Appeal Board. See 35 U.S.C. § 315(e) (providing for estoppel where a petitioner "reasonably could have raised" an invalidity "ground" before the IPR but failed to do so); *Network-1 Techs., Inc. v. Alcatel-Lucent USA, Inc.*, No. 6:11-CV-00492-RWS, 2017 WL 4856473, at *1 (E.D. Tex. Oct. 27, 2017) ("The statute provides that a party is estopped from asserting at trial invalidity grounds that it reasonably could have raised during an IPR . . ."). Indeed, Oil-Dri correctly points out that Judge St. Eve previously held Nestlé Purina was estopped from raising a particular anticipation defense based on the Shinohara patent in this litigation because it could have done so during IPR but did not. See Order, dkt. no. 224, at 4.

Nevertheless, Nestlé Purina contends the IPR estoppel does not apply here. Nestlé Purina argues that because it seeks to combine the Shinohara patent with the Kitty Litter Maxx Scoop product in an obviousness defense rather than to make a simple anticipation argument based on the Shinohara patent, this is a separate "ground" from that rejected by Judge St. Eve and is thus not estopped. It also notes that the IPR process is limited in scope to considering only prior art references consisting of "patents or printed publications." 35 U.S.C. § 311(b). Nestlé Purina argues that because Maxx Scoop is a product rather than a written publication, it could not have raised the obviousness contention it now proposes—that the Shinohara patent combined with Maxx Scoop renders the '019 patent obvious—during IPR and thus is not estopped from doing so now.

Oil-Dri, as the proponent of estoppel, bears the burden of showing that estoppel

is appropriate. See, e.g., *Clearlamp, LLC v. LKQ Corp.*, No. 12 C 2533, 2016 WL 4734389, at *9 (N.D. Ill. Mar. 18, 2016) (citing *Kennedy v. United States*, 965 F.2d 413, 417 (7th Cir. 1992)). It has failed to carry that burden. The key here is the proper scope of "printed publications" under the statute. Where there is evidence that a petitioner had reasonable access to printed publications corresponding to or describing a product that it could have proffered during the IPR process, it cannot avoid estoppel simply by pointing to its finished product (rather than the printed materials) during litigation. See, e.g., *id.* at *9 . But, even so, the estoppel proponent must present some evidence that a printed publication sufficiently describing the relevant product existed and was available upon a reasonable search. See *id.*

Oil-Dri has presented no evidence that Nestlé Purina had access to any "printed publication" regarding the Maxx Scoop litter that it could have presented during the IPR process. Although it asserts in a footnote that Nestlé Purina "relies on [Maxx Scoop] formulation sheets" in this litigation, Pl.'s Reply Br., dkt. no. 631, at 18 n.20, which it implies Nestlé Purina could have proffered during IPR to support this obviousness contention, Oil-Dri cites only a deposition with no apparent relevance to the issue. After reviewing the voluminous record, the Court located advertisements for the Maxx Scoop litter, see Ex. 123 to Def.'s Cross-Mot. for Summ. J., dkt. no. 628-128, as well as formulation details for the product, see Ex. 94 to Def.'s Cross-Mot. for Summ. J., dkt. no. 628-97. But there is no indication that the advertisements contained sufficient detail to constitute a printed publication of the product or that Maxx Scoop's formulation details were ever published. The Court therefore concludes that Judge St. Eve's previous ruling that Nestlé Purina was estopped from raising an anticipation defense based on

the Shinohara patent does not cover the obviousness ground now asserted by Nestlé Purina.

Finally, Oil-Dri does not attempt to show, beyond its estoppel arguments, that no reasonable jury could find for Nestlé Purina on the invalidity defense stemming from the Shinohara patent as combined with the Maxx Scoop litter. Oil-Dri thus is not entitled to summary judgment on Nestlé Purina's obviousness defense relating to the Shinohara patent as combined with the Maxx Scoop product.

b. Written description

Nestlé Purina next asserts that the '019 patent is invalid for lack of written description. The Federal Circuit has construed 35 U.S.C. § 112 to include a written description requirement separate from its enablement requirement. *See Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1344 (Fed. Cir. 2010) (en banc). To satisfy this requirement, a patent must include a description that "clearly allow[s] persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed." *Id.* at 1351 (internal quotation marks omitted) (second alteration in original). "[T]he test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Id.* This is "an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art." *Id.* As the Seventh Circuit recently observed, "the specification need not feature a written description of every specific variant within the scope of the claim" in order to satisfy this requirement. *ABS Global, Inc. v. Inguran, LLC*, 914 F.3d 1054, 1075 (7th Cir. 2019). Nestlé Purina will, once again, ultimately bear the burden of proving this basis for

invalidity by clear and convincing evidence. *TriMed*, 608 F.3d at 1340.

Nestlé Purina argues that the '019 patent's written description is legally insufficient because it does not describe the accused products with sufficient specificity. Specifically, it asserts that the '019 patent does not describe composite granules like the ones in the accused products, a process for their production, or a method for measuring them to determine their mean particle sizes.

But Nestlé Purina's argument misses the mark. It seems to suggest that the '019 patent must describe every possible expression of the patented invention, including a detailed description of the accused product, in order to satisfy the written description requirement. As the Federal Circuit has repeatedly held, however, the written description inquiry is limited to the four corners of the patent itself. *See Ariad*, 598 F.3d at 1351. Contrary to Nestlé Purina's argument, the requirement is inward looking; it asks whether the claims of the patent are sufficiently described by the specification of the patent. The Seventh Circuit has observed (in a case involving a claimed abuse of patent rights in violation of the antitrust laws) that "it would make little sense for a written description requirement explicitly to include every possible iteration of the broader invention. To do so would encourage patentholders to write out potentially infinite possibilities." *ABS Global*, 914 F.3d at 1075. Tellingly, written description problems arise most often—though not exclusively—where a patentee adds claims later in the patent-prosecution process that are far afield from the description provided by the original specification.⁶

⁶ Although the Federal Circuit has made clear that original claims *can* violate the written description requirement, there is reason to suspect that it is difficult for them to do so. *See, e.g., Ariad*, 598 F.3d at 1370 (Gajarsa, J., concurring) ("[O]ur predecessor court

Put simply, it is not necessary that '019 patent describe every feature of the accused products in order to satisfy the written description requirement. Rather, it must provide sufficient description of the invention claimed by claim 1 itself. Nestlé Purina's gambit to require a specific description of the composite granules of the accused products in the claims of the '019 therefore misunderstands the written description requirement. The invention of the '019 patent indisputably does not specifically claim composite granules. But that observation bears little relevance to the question at the heart of written description requirement: whether the specification of the '019 patent provides sufficient written description to "reasonably convey[] to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Id.*

Nestlé Purina will ultimately bear the burden of demonstrating by clear and convincing evidence that the '019 patent is invalid for lack of written description. The Court concludes, based on the record before it, that Nestlé Purina's written description argument misunderstands law and points to no evidence from which a reasonable jury could find its favor under the controlling standard. Oil-Dri is therefore entitled to summary judgment on Nestlé Purina's written description defense.

c. Equitable estoppel

Finally, Nestlé Purina asserts that Oil-Dri is equitably estopped from enforcing the '019 patent against it.

In the context of patent infringement, the three elements of equitable estoppel that must be established are: (1) the patentee, through

repeatedly held that, as part of the disclosure, 'original claims constitute their own description.'" (quoting *In re Koller*, 613 F.3d 819, 823-24 (C.C.P.A. 1980))). At the very least, because "[t]he claims as filed are part of the specification, [they] may provide or contribute to compliance with Section 112." *Hyatt v. Boone*, 146 F.3d 1348, 1352 (Fed. Cir. 1998).

misleading conduct, led the alleged infringer to reasonably believe that the patentee did not intend to enforce its patent against the infringer; (2) the alleged infringer relied on that conduct; and (3) due to its reliance, the alleged infringer would be materially prejudiced if the patentee were permitted to proceed with its charge of infringement.

Aspex Eyewear Inc. v. Clariti Eyewear, Inc., 605 F.3d 1305, 1310 (Fed. Cir. 2010).

Nestlé Purina will ultimately bear the burden of proving each of these elements by a preponderance of the evidence. *A.C. Aukerman Co. v. R.K. Chaides Constr. Co.*, 960 F.3d 1020, 1046 (Fed. Cir. 1992). On a motion for summary judgment, however, the Court draws all reasonable inference in Nestlé Purina's favor, as it is the non-moving party. See *Steimel*, 823 F.3d at 910.

Oil-Dri contends that Nestlé Purina has failed to produce evidence from which a reasonable finder of fact could find misleading conduct that would satisfy the first requirement of equitable estoppel. "Misleading conduct occurs when the alleged infringer is aware of the patentee or its patents, and knows or can reasonably infer that the patentee has known of the allegedly infringing activities for some time." *Hight Point SARL v. Sprint Nextell Corp.*, 817 F.3d 1325, 1330 (Fed. Cir. 2016). In other words, "[w]ithout the requisite knowledge, a patentee cannot engage in misleading conduct." *PPC Broadband, Inc. v. Corning Optical Commc'ns RF, LLC*, No. 5:11-cv-761 (GLS/DEP), 2016 WL 6537977, at *13 (N.D.N.Y. Nov. 3, 2016). Although mere silence can sometimes qualify as misleading conduct, it "must be accompanied by some *other* factor which indicates that the silence was sufficiently misleading as to amount to bad faith." *Hemstreet v. Comput. Entry Sys. Corp.*, 972 F.2d 1290, 1295 (Fed. Cir. 1992). This standard is typically satisfied where, for instance, a patentee threatens an infringement suit then falls silent for a significant period, lulling a defendant into a belief that it is safe from litigation. See, e.g., *id.* (discussing the standard); *Aukerman*, 960

F.2d at 1043-44 (applying the standard to a period of silence).

Oil-Dri argues that Nestlé Purina has presented inadequate evidence of misleading conduct. Specifically, Oil-Dri asserts that it was unaware of the allegedly infringing activities until shortly before it filed this infringement suit. It argues that the communications upon which Nestlé Purina contends it reasonably relied—negotiations for the sale of non-swelling clay and other business dealings—took place years before Oil-Dri became aware of Nestlé Purina's allegedly infringing activities. In response, Nestlé Purina points to evidence indicating that Oil-Dri undertook competitive testing of the accused products as early as 2005, received the specifications for the non-swelling clay Nestlé Purina used in its production process in 2006 as part of the negotiations discussed above, and received an overview of Nestlé Purina's manufacturing process from one of its former employees in 2006. According to Nestlé Purina, this evidence demonstrates that Oil-Dri had knowledge of the allegedly infringing processes before it misled Nestlé Purina about its intent to sue and long before it actually filed suit.

The Court concludes that Nestlé Purina has pointed to insufficient evidence of Oil-Dri's knowledge to permit a finding in its favor on the equitable estoppel defense. It is important to return to the invention of the '019 patent: a litter that takes advantage of the clumping relationship between relatively larger non-swelling clay particles and relatively smaller swelling ones. First, regarding Nestlé Purina's assertion that competitive testing apprised Oil-Dri of the alleged infringement, Nestlé Purina itself argues repeatedly in its papers that it is impossible to determine the size of the particles used to manufacture the composite granules in its engineered litter by assessing the final product alone. It would therefore be unreasonable for a finder of fact to conclude

that Oil-Dri was aware of the relative sizes of the swelling and non-swelling clays used in the accused products simply by assessing the composite granules.

Evidence that Nestlé Purina disclosed specifications such as the size of the non-swelling clay particles it used in the course of negotiating a contract under which Oil-Dri would supply the material is likewise insufficient. The '019 patent teaches a litter exploiting physical dynamics caused by relative sizing between swelling and non-swelling clays; evidence of the size of one and not the other is insufficient to constitute knowledge of infringement of the '019 patent.

Finally, the overview of the manufacturing process that Oil-Dri received from a former Nestlé Purina employee is also insufficient to permit a reasonable finder of fact to infer knowledge of infringement. See Ex. 72 to Def.'s Cross-Mot. for Summ. J., dkt. no. 682-75. That overview describes the agglomeration process employed to create composite granules. But it does so in general terms, including broad details of the coating process without indicating the relative sizes of swelling and non-swelling clay particles used in the process.⁷

"Without the requisite knowledge, a patentee cannot engage in misleading conduct." *PPC Broadband*, 2016 WL 6537977, at *13. Even drawing all reasonable inference in its favor, Nestlé Purina has failed to point to evidence from which a finder of fact reasonably could infer that Oil-Dri knew of the alleged infringement before the

⁷ The e-mail exchange in question does discuss patent infringement, but that discussion was about whether Oil-Dri's patents might cover the process of creating composite granules itself. Notably, those involved concluded that Oil-Dri's patents did not cover the process described. That is fairly unsurprising because the '019 patent's invention is not for the process of making a composite granule. If anything, the exchange strengthens Oil-Dri's contention that it lacked knowledge, in 2006, of the particular activities it now alleges infringe the '019 patent.

communications that Nestlé Purina now contends were misleading. The equitable estoppel defense fails therefore because no reasonable finder of fact could conclude that, before the record establishes it was aware of the allegedly infringing conduct, Oil-Dri misled Nestlé Purina—through silence or otherwise—regarding its intent to enforce the '019 patent.

Because Nestlé Purina missed the mark on misleading conduct, the Court does not reach the parties' arguments about reasonable reliance and prejudice.

B. Claim 30

Both parties have moved for summary judgment on the question of literal infringement of claim 30. Again, "[l]iteral infringement exists when every limitation recited in the claim is found in the accused device." *Akzo Nobel*, 811 F.3d at 1341. Claim 30 is a method patent that sets out the process for manufacturing the animal litter of the '019 patent. It has three steps: (a) "combining a particulate non-swelling clay material with a suitable particulate swelling clay to form a composition wherein the mean particle size of the particulate non-swelling clay material is greater than the mean particle size of the particulate swelling clay"; (b) "mixing the composition to effect a substantially uniform distribution of the two materials"; and (c) "packaging a quantity of the mixed composition." See '019 Patent at 11:3-12.

The literal infringement analysis for claim 30 is significantly simpler than that for claim 1. For many of the same reasons the Court concluded that claim 1 concerns a product defined by its ingredients, claim 30 by its own terms is clearly limited to a "composition" made up of "particulate"—i.e., "composed of separate and discrete particles"—non-swelling and swelling clays. Infringement of claim 30 must therefore be

assessed after the combination described in the claim is complete. See *PIN/NIP*, 304 F.3d at 1238; *Exxon*, 64 F.3d at 1556-58. That is, because the first step of claim 30 teaches "combining" particulate swelling and non-swelling clay "to form a composition wherein" swelling and non-swelling clays remain separate and discrete, the controlling question must be whether the required limitations are present in the accused product after it is "combined." Oil-Dri's conclusory assertion that "it is crystal clear that the presence of 'particulates'" in claim 30's composition "is assessed before 'combining,'" Pl.'s Reply Br., dkt. no. 631, at 12-13, entirely ignores the second half of the first step and is wholly unpersuasive. Under claim 30, the first step is only satisfied where the *composition* contains both particulate non-swelling clay material and particulate swelling clay. And, as construed by the Court, "particulate" means "composed of separate and discrete particles." *Oil-Dri*, 2018 WL 4216627, at *2.

The record tilts one-sidedly in Nestlé Purina's favor such that it is entitled to summary judgment. Nestlé Purina's expert, Chett Boxley, testified that the coating process Nestlé Purina employs to create its composite granules results in combined particles made up of both swelling and non-swelling clays, which physically and chemically bond during the coating process. See Boxley Aff., Ex. PPP to Def.'s Reply Br., dkt. no. 632-23, ¶¶ 26-30 ("Upon the swelling clay dust making contact with the wet seeds, the migration of moisture from the wet seeds and centrifugal forces cause the swelling clay dust to lose its physical form and become a hydrated gel that smooths out over the wet seeds."). These post-combination composite granules indisputably are not "composed of separate and discrete" swelling and non-swelling clay particles, because those particles have been agglomerated into unified composite particles including both

swelling and non-swelling clay.

Oil-Dri's averments to the contrary are unsupported. In its response to Nestlé Purina's Local Rule 56.1 statement, Oil-Dri asserts that Boxley's testimony is based on "hypothetical speculation" without pointing to evidence of its own. Pl.'s Resp. to Def.'s LR 56.1 Stat., dkt. no. 632-1, ¶ 17. Oil-Dri further contends that, even after agglomeration into composite granules, Nestlé Purina's accused products are still made up of particles of swelling and non-swelling clay. Pl.'s LR 56.1 Stat., dkt. no. 603, ¶ 37. But Oil-Dri's argument ignores the controlling construction of "particulate." As the Court has noted several times, "particulate" in this context means "composed of *separate and discrete* particles." *Oil-Dri*, 2018 WL 4216627, at *2 (emphasis added). There is no competent evidence in the record that the composite granules resulting from Nestlé Purina's agglomeration process consist of such particles.

Nor can Oil-Dri get around this obstacle by relying on expert testimony about what happens to the composite granules after they are crushed with a hammer. See, e.g., Pl.'s LR 56.1 Stat., dkt. no. 603, ¶ 37 (noting that separate and discrete particles of swelling and non-swelling clays can be produced from composite granules when crushed). The Federal Circuit is clear that "[a] device does not infringe simply because it is possible to alter it in a way that would satisfy all the limitations of a patent claim." *Accent Packaging, Inc. v. Leggett & Platt, Inc.*, 707 F.3d 1318, 1327 (Fed. Cir. 2013) (internal quotation marks omitted). The Court has little trouble concluding that smashing the accused product with a hammer in order to disaggregate the aggregated swelling and non-swelling clay is an alteration that cannot support a claim of infringement. *Cf. id.* (finding that the removal of an easily detached latch from a device

used to bail recyclable or solid waste was an impermissible alteration the result of which could not support infringement).

The parties raise several other arguments regarding claim 30 related to the required sequencing of the claim's steps and when in Nestlé Purina's process they allegedly happen. But it is not necessary to reach those arguments, because no reasonable jury could conclude that the accused products satisfy the limitations of claim 30's first step. The Court therefore grants summary judgment of non-infringement in favor of Nestlé Purina with regard to claim 30.⁸

Conclusion

The Court grants in part and denies in part both Oil-Dri's and Nestlé Purina's motions for summary judgment [600, 621], as follows. The Court denies both sides' motions for summary judgment on the question of literal infringement of claim 1 of the patent in suit, except as to the Maricopa products, on which the Court grants Nestlé Purina's cross-motion. The Court also denies both parties' motions for summary judgment on Nestlé Purina's prior art defenses. The Court grants Oil-Dri's motion for summary judgment on Nestlé Purina's written description and equitable estoppel defenses. Finally, the Court denies Oil-Dri's motion for summary judgment of literal infringement of claim 30 and grants Nestlé Purina's cross-motion for summary judgment of non-infringement of that claim.


MATTHEW F. KENNELLY
United States District Judge

Date: February 22, 2019

⁸ Because it is dependent upon claim 30, the cross-motion for summary judgment of non-infringement is also granted on claim 32.