

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

ATELIERS DE LA HAUTE-GARONNE	:	
(French Corporation) and F2C2 SYSTEMS	:	
S.A.S. (French Corporation),	:	
	:	
Plaintiffs,	:	
	:	
v.	:	Civil Action No. 09-CV-598-LPS
	:	
BROETJE AUTOMATION-USA INC.	:	
(Delaware Corporation) and BRÖTJE-	:	
AUTOMATION GMBH (German	:	
Corporation),	:	
	:	
Defendants.	:	

Scott G. Lindvall, Esquire and Sarah Welbourne Saunders, Esquire of KAYE SCHOLER LLP, New York, New York.
Melanie K. Sharp, Esquire; Monté T. Squire, Esquire; and Erika R. Caesar, Esquire of YOUNG CONAWAY STARGATT & TAYLOR, LLP, Wilmington, Delaware.

Attorneys for Plaintiffs.

Patrick J. Kelleher, Esquire; Darren S. Cahr, Esquire; and Carrie A. Beyer, Esquire of DRINKER BIDDLE & REATH LLP, Chicago, Illinois.
Todd C. Schiltz, Esquire and Karen V. Sullivan, Esquire of DRINKER BIDDLE & REATH LLP, Wilmington, Delaware.

Attorneys for Defendants.

OPINION

UNSEALED ON OCTOBER 4, 2011

September 26, 2011
Wilmington, Delaware.


STARK, U.S. District Judge:

By Order dated September 22, 2011 (D.I. 321), the Court granted Defendants' Motion for Partial Summary Judgment of Invalidity for Failure to Disclose Best Mode (D.I. 162). The Court indicated in its Order that an Opinion explaining the Court's reasoning would issue in due course. (D.I. 321) This is the Court's Opinion. In addition to addressing the best mode defense, the Court here also explains that it will deny Plaintiffs' motion to strike the best mode defense as untimely.

BACKGROUND

The Parties

Plaintiffs Ateliers de la Haute-Garonne and F2C2 Systems S.A.S. (collectively, "AHG") filed suit against Defendants Broetje Automation-USA Inc. and Brötje-Automation GmbH (collectively, "Broetje") in the Central District of California in May 2009, asserting claims of patent infringement, trade dress infringement, unfair competition, and intentional interference with prospective economic advantage. The case was transferred to this Court in August 2009. (D.I. 1)

The Patents-in-Suit

AHG has asserted two patents in this case: United States Patent Nos. 5,011,339 ("the '339 patent") and 5,143,216 ("the '216 patent"). AHG alleges infringement of Claims 1, 2, 3, and 6 of the '339 patent, and claims 1, 2, and 6 of the '216 patent. Both patents claim benefit of a French priority application filed in December 1988, and relate generally to a method and apparatus for dispensing objects, such as rivets, through a tube with grooves or passageways along its inner surface. On February 23, 2011, the Court issued a memorandum opinion construing the disputed claim limitations. (D.I. 79)

The Parties' Motions

Broetje deposed the named inventors of both patents-in-suit, Jean-Marc Auriol and Phillipe Bornes, on July 29 and August 2, 2011, respectively. Shortly thereafter, on August 8, 2011, Broetje supplemented its contention interrogatory responses to assert new invalidity defenses based on the inventors' deposition testimony. Among the newly added defenses was an assertion that the patents-in-suit were invalid for failure to disclose the best mode as required by 35 U.S.C. § 112 ¶ 1. On August 22, 2011, Broetje moved for summary judgment of invalidity based on its newly asserted best mode defense. (D.I. 162) On September 1, 2011, AHG filed a cross-motion to strike Broetje's newly added invalidity defenses, including best mode, as untimely. (D.I. 203) On September 2, 2011, AHG filed its answering brief opposing summary judgment on Broetje's best mode defense. (D.I. 223) Summary judgment briefing was completed on September 9, 2011 (D.I. 241), and the Court heard oral argument on the motion during the pre-trial conference on September 19, 2011 (D.I. 334).

LEGAL STANDARDS

Failure to Disclose or Supplement

Rule 37(c)(1) of the Federal Rules of Civil Procedure provides that “[i]f a party fails to provide information . . . as required by Rule 26(a) or (e), the party is not allowed to use that information . . . to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless.” In determining whether a party's failure was “substantially justified” or “harmless,” courts consider various factors, including (1) the importance of the information withheld; (2) the prejudice or surprise to the party against whom the evidence is offered; (3) the likelihood of disruption of the trial; (4) the possibility of curing the prejudice; (5) the explanation for the failure to disclose; and (6) the presence of bad faith or

willfulness in not disclosing the evidence (the “*Pennypack* factors”). See *Konstantopoulos v. Westvaco Corp.*, 112 F.3d 710, 719 (3d Cir. 1997) (citing *Meyers v. Pennypack Woods Home Ownership Ass’n*, 559 F.2d 894, 904-05 (3d Cir. 1977)). In applying the various *Pennypack* factors, the Court is guided by the principle that excluding “critical evidence” is an “extreme sanction, not normally to be imposed absent a showing of willful deception or flagrant disregard of a court order.” *Konstantopoulos*, 112 F.3d at 719 (internal quotations and citations omitted). The determination of whether to exclude evidence or defenses is committed to the discretion of the Court. *Id.*

Summary Judgment

“The court shall grant summary judgment if the 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). The moving party bears the burden of demonstrating the absence of a genuine issue of material fact. See *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 586 n.10 (1986). An assertion that a fact cannot be – or, alternatively, is – genuinely disputed must be supported either by citing to “particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations (including those made for the purposes of the motion only), admissions, interrogatory answers, or other materials,” or by “showing that the materials cited do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact.” Fed. R. Civ. P. 56(c)(1)(A) & (B). If the moving party has carried its burden, the nonmovant must then “come forward with specific facts showing that there is a *genuine issue for trial*.” *Matsushita*, 475 U.S. at 587 (internal quotation marks omitted). The Court will “draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility

determinations or weigh the evidence.” *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000).

To defeat a motion for summary judgment, the non-moving party must “do more than simply show that there is some metaphysical doubt as to the material facts.” *Matsushita*, 475 U.S. at 586; *see also Podohnik v. U.S. Postal Service*, 409 F.3d 584, 594 (3d Cir. 2005) (stating party opposing summary judgment “must present more than just bare assertions, conclusory allegations or suspicions to show the existence of a genuine issue”) (internal quotation marks omitted). However, the “mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment;” and a factual dispute is genuine only where “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, 247-48 (1986). “If the evidence is merely colorable, or is not significantly probative, summary judgment may be granted.” *Id.* at 249-50 (internal citations omitted); *see also Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986) (stating entry of summary judgment is mandated “against a party who fails to make a showing sufficient to establish the existence of an element essential to that party’s case, and on which that party will bear the burden of proof at trial”). Thus, the “mere existence of a scintilla of evidence” in support of the non-moving party’s position is insufficient to defeat a motion for summary judgment; there must be “evidence on which the jury could reasonably find” for the non-moving party. *Anderson*, 477 U.S. at 252.

DISCUSSION

I. AHG’s Cross-Motion to Strike Broetje’s Best Mode Defense

AHG asks the Court to strike Broetje’s best mode defense as untimely and prejudicial. (D.I. 204 at 15) AHG contends that it “does not have a fair opportunity to research or properly

investigate” Broetje’s late-asserted best mode defenses, “or to test them through any written discovery or depositions.” (*Id.*) According to AHG, the deadline for parties to respond to contention interrogatories was July 2, 2010 and the close of fact discovery was July 8, 2011, yet Broetje’s new best mode defense was not disclosed until August 8, 2011. (*Id.* at 16)

Broetje defends the timing of the disclosure of its best mode defense. First, Broetje contends that the best mode defense relies entirely on the testimony of the inventors of the patents-in-suit. Second, Broetje argues that the inventors refused to appear for depositions prior to July and August 2011. Broetje emphasizes that it promptly supplemented its contention interrogatories within days of the inventors’ July 29 and August 2, 2011 depositions. (D.I. 299 at 4-5, 16) Moreover, in Broetje’s view, AHG’s cross-motion to strike the newly-added defenses – including the best mode defenses – is itself an untimely dispositive motion, or alternatively an improper discovery motion in violation of this Court’s procedures. (*Id.* at 7)

Having considered the record and the pertinent factors, the Court concludes that the “extreme sanction” of precluding Broetje from asserting its best mode defense is not warranted. In concluding that the timing of Broetje’s best mode defense was “substantially justified,” the Court is guided by the “preference of the Federal Rules of Civil Procedure in general . . . for resolving disputes on their merits,” *Krupski v. Costa Crociere S.p.A.*, 130 S. Ct. 2485, 2488 (2010), particularly where, as here, the issue is one of patent validity, *see United States v. Glaxo Group Ltd.*, 410 U.S. 52, 69 (1973) (noting that “there is a public interest favoring the judicial testing of patent validity and the invalidation of specious patents”). On balance, the various *Pennypack* factors weigh in favor of allowing Broetje to assert its best mode defense. First, Broetje’s best mode theories are extremely important to its invalidity defense, as they implicate every asserted claim of both patents-in-suit. Second, any resultant prejudice or surprise to AHG

is minimized or reduced since the best mode defense is based largely on information exclusively within the inventors' own knowledge and possession, such as whether they subjectively contemplated any particular best mode for carrying out the claimed invention as of the relevant filing date. Third, Broetje's best mode defense was unlikely to disrupt the trial, and neither party requested that the Court delay trial on that basis. Fourth, AHG could have avoided any alleged prejudice by making its inventors available for deposition sooner. In addition, AHG undertook an effort to cure the alleged prejudice arising from the late-assertion of the best mode defense by submitting inventor declarations (which the Court has considered) in opposing Broetje's summary judgment motion. Fifth, Broetje's reasons for failing to disclose its best mode defense sooner, although not entirely innocent (as both sides were responsible for delays), are nonetheless reasonable under the circumstances, as Broetje could not have fully discovered the bases for its best mode defenses until both inventor depositions had been completed. Sixth, and finally, there is no evidence of bad faith or willfulness on Broetje's part in not disclosing the best mode defense sooner; to the contrary, Broetje promptly supplemented its contention interrogatories to include the best mode defense within days of completing the inventor depositions.

In sum, the Court concludes that the various *Pennypack* factors, together with the general preference for resolving patent validity disputes on their merits, warrant permitting Broetje to assert its best mode defense. Accordingly, the Court will deny AHG's cross-motion to strike Broetje's best mode defense.¹

¹Plaintiffs' motion to strike the late-asserted defenses is denied as moot without prejudice in all other respects.

II. Broetje's Motion for Summary Judgment of Invalidity for Failure to Disclose Best Mode

A. Best Mode

A patent specification "shall set forth the best mode contemplated by the inventor of carrying out his invention." 35 U.S.C. § 112 ¶ 1. The best mode inquiry is assessed on a claim by claim basis. *Pfizer, Inc. v. Teva Pharms. USA, Inc.*, 518 F.3d 1353, 1365 (Fed. Cir. 2008). "Best mode issues can arise if any inventor fails to disclose the best mode known to him or her" as of the date the application for patent is filed. *Pannu v. Iolab Corp.*, 155 F.3d 1344, 1351 n.5 (Fed. Cir. 1998). "A violation for best mode must be proved by clear and convincing evidence." *AllVoice Computing PLC v. Nuance Commc 'ns, Inc.*, 504 F.3d 1236, 1240 (Fed. Cir. 2007).

The best mode inquiry has two prongs. First is a subjective inquiry into "whether, at the time of patent filing, the inventor possessed a best mode of practicing the claimed invention," which "focus[es] on the inventor's personal preferences as of the application's filing date." *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1360 (Fed. Cir. 2011). The second prong is an objective assessment as to whether the inventor "concealed" the best mode from the public. *Id.* "Even though there may be a general reference to the best mode, the quality of the disclosure may be so poor as to effectively result in concealment." *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1536 (Fed. Cir. 1987).

The Federal Circuit has held patents invalid for best mode violations in two basic scenarios: (1) where the patent does "not adequately disclose a preferred embodiment of the invention," and (2) where a patentee has "failed to disclose aspects of making or using the claimed invention and the undisclosed matter materially affected the properties of the claimed

invention.” *Bayer AG v. Schein Pharms., Inc.*, 301 F.3d 1306, 1319 (Fed. Cir. 2002).

B. Broetje’s Best Mode Defenses and AHG’s Response

Broetje alleges two best mode defenses. First, Broetje contends that the patents-in-suit fail to adequately disclose Mr. Bornes’s subjective belief that tubes with “five grooves” or passageways were the best mode of practicing the claimed invention. (D.I. 163 at 3, 8) Second, Broetje contends that the patents-in-suit fail to adequately disclose Mr. Auriol’s subjective belief that tubes with an “odd number” of grooves were the best mode of carrying out the claimed invention. (*Id.* at 4, 9)

In response, AHG raises two legal challenges to Broetje’s best mode theories. First, AHG argued at the pre-trial conference that the legal standard for best mode requires, in cases of joint inventorship, that all joint inventors reach an agreement or “meeting of the minds” that there is only a single best mode for practicing the invention. (D.I. 334 at 69-70) Thus, AHG suggests, the discrepancy between Mr. Bornes’ subjective best mode (five grooves) and Mr. Auriol’s subjective best mode (odd-numbered grooves) defeats Broetje’s “odd number” best mode defense as a matter of law, because both inventors jointly agreed only that the pentagonal five-groove configuration was the best mode, and not the “odd number” best mode. (*Id.*) Second, following the pre-trial conference, AHG argued in a supplemental letter to the Court that the legal standard for best mode requires “intentional” concealment of the alleged best mode, and that summary judgment should be denied because Broetje fails to offer any evidence of intent to conceal. (D.I. 315) Finally, AHG relies on inventor declarations submitted by Messrs. Bornes and Auriol in opposition to Broetje’s motion for summary judgment. (D.I. 223 Exs. A and B)

C. Issues of Law

Where, as here, the parties present disputed issues of law, the Court may resolve those disputes on summary judgment. *See Clark v. Modern Group Ltd.*, 9 F.3d 321, 335 (3d Cir. 1993) (“A court may resolve any legal issue that does not depend on the resolution of disputed facts on a Rule 56 motion for summary judgment.”); *Felton v. Southeastern Pa. Transp. Authority*, 952 F.2d 59, 60 (3d Cir. 1991) (“This is an appropriate case for summary judgment since the dispute is not over the operative facts, but as to the legal effect thereof.”). The Court finds neither of AHG’s legal arguments persuasive.

AHG cites no legal authority for the proposition that joint inventors must reach a collective consensus or meeting of the minds as to the existence of only a single best mode. To the contrary, the Federal Circuit has repeatedly emphasized that the first prong of the best mode inquiry is subjective and personal to each individual inventor. *See Pannu*, 155 F.3d at 1351 n.5 (stating “[b]est mode issues can arise if *any* inventor fails to disclose the best mode known to *him or her*” as of effective filing date) (emphasis added); *Wellman*, 642 F.3d at 1357, 1361-62, 1364-65 (finding best mode violation for failure to disclose subjective preferences contemplated by “at least *one* of the inventors” or “*one* or more inventors”) (emphasis added). For instance, in *Wellman*, the Federal Circuit separately analyzed various inventors’ individual preferences regarding their respective contributions to different aspects of the claimed invention, including both the “resin” and the “additive.” 642 F.3d at 1361-62. In affirming summary judgment of best mode invalidity, the Federal Circuit consistently indicated that the best mode requirement was violated by the failure of even a single inventor to disclose his contemplated best mode. *Id.* at 1357 (noting that the “patents do not set forth the best mode of carrying out the invention contemplated by at least *one* of the inventors”) (emphasis added); *id.* at 1360 (“Best mode issues

can arise if *any* inventor fails to disclose the best mode known to *him or her*”) (emphasis added; internal quotation marks and citation omitted); *id.* at 1361 (“There is no genuine dispute that at least *one* inventor subjectively believed that Ti818 . . . was the best resin available”) (emphasis added); *id.* (“Dr. Nichols had an obligation to disclose the recipe *he* believed to be the best mode at the time of patent filing”) (emphasis added); *id.* at 1362 (“Put simply, at the time of filing, *an* inventor believed that the 2003 recipe of Ti818 was the best mode. . . There is no genuine dispute that at least *one* inventor subjectively believed that the specific HUR additive used in Ti818 . . . was essential.”) (emphasis added). Thus, although the patents-in-suit in *Wellman* each listed a total of six named inventors, the Federal Circuit affirmed summary judgment of best mode invalidity based on the failure of the *individual* inventors to disclose their personal preferences relating to various aspects of the invention. The Court neither stated nor suggested that there is any requirement of a consensus or agreement among all joint inventors limited to a single best mode or involving only a single aspect of the invention.² Accordingly, the Court will not deny summary judgment based on the alleged failure of Mr. Bornes and Mr. Auriol to agree upon a single best mode.

AHG’s argument that an inventor’s “concealment” of the best mode must be “intentional” is also unpersuasive. Although some Federal Circuit decisions do contain passing references to intentional concealment in connection with the best mode requirement, *see., e.g., Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1575 (Fed. Cir. 1992), the clear weight of Federal Circuit authority holds that intentional concealment is *not* required for

²For example, the Federal Circuit never separately analyzed whether inventors Griffith or Humelsine, both named inventors of the patents-in-suit, had ever reached an agreement with the other inventors concerning only a single best mode for practicing the claimed invention.

best mode violations, *see, e.g., U.S. Gypsum Co. v. Nat'l Gypsum Co.*, 74 F.3d 1209, 1215-16 (Fed. Cir. 1996) (noting that “the quoted statement in *Brooktree* was dictum” and that concealment does not require intent because “inquiry into an intent to conceal, being subjective, is inconsistent with the objective nature of the second [prong] of best mode compliance.”); *Minco, Inc. v. Combustion Eng'g, Inc.*, 95 F.3d 1109, 1116 (Fed. Cir. 1996) (“If the inventor appreciates a best mode for carrying out the invention, invalidity may result from the failure to disclose, regardless of whether the inventor specifically intended to conceal his or her best mode.”); *Graco, Inc. v. Blinks Mfg. Co.*, 60 F.3d 785, 789-90 (Fed. Cir. 1995) (“[S]pecific intent to deceive is not a required element of a best mode defense.”); *In re Hayes Microcomputer Prods., Inc.*, 982 F.2d 1527, 1546 (Fed. Cir. 1992) (“[F]ailure to disclose the best mode may occur without the intent to deceive required for a finding of inequitable conduct.”); *Spectra-Physics*, 827 F.2d at 1535 (noting “only evidence of ‘concealment,’ whether accidental or intentional, is considered”); *In re Sherwood*, 613 F.2d 809, 816 (C.C.P.A. 1980) (“[E]vidence of concealment (accidental or intentional) is to be considered.”).³

AHG cites *High Concrete Structures, Inc. v. New Enter. Stone & Lime Co., Inc.*, 377 F.3d 1379, 1383 (Fed. Cir. 2004), for the proposition that “[t]he best mode requirement of section 112 is not violated by unintentional omission of information that would be readily known to persons of skill in the art.” (D.I. 315) However, *High Concrete Structures* does not support AHG’s position that best mode violations require intentional concealment; instead, the case

³To the extent there is a conflict between those cases stating that intentional concealment is required, and those cases holding that it is not, the earlier cases holding that intent is *not* required are binding precedent. *See Newell Cos., Inc. v. Kenney Mfg. Co.*, 864 F.2d 757, 765 (Fed. Cir. 1988) (“Where there is direct conflict, the precedential decision is the first.”).

demonstrates why the inventors should have disclosed the concealed information at issue in this case. In *High Concrete Structures*, the Federal Circuit merely held that the alleged concealment of information pertaining to the use of a crane was not a best mode violation, because the omitted information was not a best mode as it was “undisputed that anyone with experience . . . would know to use a crane.” *Id.* at 1384. The Federal Circuit contrasted such “information that would be readily known” (which was not a best mode and, thus, need not be disclosed) with examples of actual best modes that must be disclosed, such as information that was “determined through experimentation or selection or trial and error,” or “essential to practice of the invention.” *Id.*

Here, the facts are quite different from those in *High Concrete Structures*. The inventors testified, and neither party disputes, that the concealed information concerns the use of grooves to practice the claimed invention. This information was determined through experimentation and was essential to practicing the invention. The concealed information, therefore, is a best mode that must be disclosed. There is no record evidence that an odd number of grooves was “information that would be readily known,” particularly given AHG’s position throughout this litigation that the use of grooves is a patentably distinct difference over the prior art.

In sum, the Court is unpersuaded by AHG’s legal challenges to Broetje’s best mode defense. Federal Circuit precedent does not require agreement among joint inventors as to a single best mode, nor does it require intentional concealment.

D. Issues of Fact

Having rejected AHG’s legal challenges to Broetje’s best mode defenses, the Court next considers whether there are any genuine disputes of material fact with respect to either of Broetje’s best mode theories. While the “best mode inquiry proceeds on a claim by claim basis,”

and “typically requires a claim construction, claim terms need only be construed to the extent necessary to resolve the controversy.” *Wellman*, 642 F.3d at 1360-61 (internal quotations and citations omitted).⁴ Here, the Court has construed the term “grooves” to mean “passageways.” It is undisputed that both of Broetje’s best mode defenses are directed to the grooves and/or passageway limitations of the claimed invention, and thereby implicate all asserted claims of both patents-in-suit. (D.I. 178 at 2) (“Each of the asserted claims of the Patents-in-Suit requires a ‘groove’ or ‘passageway’ along the inner surface of the tube.”) The Court now turns to the record with respect to Broetje’s “five grooves” and “odd number” best mode defenses.

1. “Five Groove” Best Mode Defense

Broetje’s first best mode theory is that the patents fail to disclose Mr. Bornes’ subjective belief that tubes containing “five grooves” were the best mode of carrying out the claimed invention. (D.I. 163 at 3, 8) During his deposition, Mr. Bornes testified that the patents-in-suit do not disclose five grooves anywhere in their specifications, and that AHG had ultimately selected a five-groove configuration because it allowed “for the proper results in terms of [the] rivet moving through the tube.”⁵ (Bornes Dep. at 31-32) Broetje contends that this testimony conclusively establishes a best mode violation, because – as of the effective filing date – Mr. Bornes viewed five grooves as the preferred embodiment yet failed to disclose that preference in the patents-in-suit. (D.I. 163 at 8)

⁴ AHG does not contend that Broetje’s best mode defenses implicate less than all asserted claims, nor does it contend that either of Broetje’s best mode theories are directed to subject matter falling outside the scope of those asserted claims.

⁵The parties’ summary judgment briefs provided only excerpts of the inventors’ deposition testimony. Per the Court’s direction (D.I. 316), the parties submitted the entirety of both inventors’ deposition transcripts, which the Court has reviewed in deciding the best mode issue.

In response, AHG argues that Mr. Bornes' testimony does not establish a best mode violation because Mr. Bornes was asked questions that "conspicuously avoided referencing any time frames whatsoever," which "standing alone precludes summary judgment." (D.I. 223 at 2) AHG also submitted inventor declarations from both Mr. Bornes and Mr. Auriol, each asserting that the five-groove configuration was not recognized as a preferred embodiment until well after the relevant December 1988 filing date of the French priority application. (D.I. 223 at 4, Ex. A and B)⁶ Thus, AHG argues, summary judgment should be denied as to Broetje's five-groove best mode theory, because under the first prong of the best mode inquiry the inventors "simply had not contemplated a best mode as of any application date." (D.I. 223 at 4)

The Court agrees that AHG has raised a genuine dispute of material fact regarding whether the inventors were in possession of the "five groove" best mode as of the relevant December 1988 French priority date. AHG has introduced affirmative evidence, in the form of inventor declarations from Mr. Bornes and Mr. Auriol, in support of its contention that the inventors did not identify the five-groove configuration as a best mode until after the relevant date. Drawing all reasonable inferences in favor of AHG as the non-moving party, the Court finds that a triable issue of fact exists regarding when the inventors came into possession of the five-groove best mode. The Court, therefore, denies summary judgment with respect to Broetje's five-groove best mode defense.

⁶It is undisputed that the adequacy of the disclosure of the best mode is determined with reference to the specification contained in the French patent application to which the patents-in-suit claim priority. See D.I. 223 at 5; D.I. 241 at 4; see also *Transco Prods., Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 558 (Fed. Cir. 1994) ("[O]ne looks to the foreign [priority] application and its filing date to determine the adequacy of the best mode disclosure and not to the filing date of the corresponding U.S. application.").

2. “Odd Number” Best Mode Defense

Broetje’s second best mode theory is that the patents fail to disclose Mr. Auriol’s subjective belief that an “odd number” of grooves was necessary to carry out the claimed invention. (D.I. 163 at 4, 9) During his deposition, Mr. Auriol testified, “You need an odd number” of grooves in order “[t]o avoid that the rivet turns on itself.” (Auriol Dep. at 40) He added: “We realized . . . from the very beginning” that “[i]f we only had two grooves, there was a chance that the rivet would rotate on itself inside the tube,” resulting in jamming within the tube. (*Id.* at 44-45)

According to Broetje, Mr. Auriol’s testimony satisfies the subjective first prong of the best mode inquiry, because he admittedly recognized “from the very beginning” that an odd number of grooves was needed to practice the claimed invention and avoid jamming, the very problem the invention was designed to address. Broetje further contends that Mr. Auriol’s deposition testimony satisfies the objective second prong of the best mode inquiry, a showing of concealment, because “[i]t is indisputable that the patents-in-suit *never* say that use of an odd number” of grooves is best but, “[i]nstead, the patents provide two examples with an even number (2) of grooves and never reveal that Mr. Auriol thought they would not work as well as a tube with an odd number of grooves and were prone to fail.” (D.I. 163 at 9)

Strikingly, AHG’s answering brief and accompanying exhibits do not respond to Broetje’s “odd number” best mode theory arising from Mr. Auriol’s deposition testimony. Instead, AHG’s Counterstatement of Facts only responds to Broetje’s “five groove” best mode theory in connection with Mr. Bornes’ deposition testimony, followed by a conclusory assertion that “AHG disagrees that items 4-9 [items 7-9 deal with the “odd number” theory] in Broetje’s

Opening Brief are undisputed facts.” (D.I. 223 at 2) To the extent that Mr. Auriol’s deposition testimony is mentioned at all in AHG’s brief, it is only for the purpose of “establish[ing] that the discovery of a 5 point pentagonal shape occurred *after* [AHG] filed the French patent application.” (D.I. 223 at 4) Likewise, the declarations submitted by Mr. Bornes and Mr. Auriol are solely directed to addressing Broetje’s “five-groove” best mode theory; they do not at all address Broetje’s separate “odd number” best mode defense. Indeed, neither AHG’s answering brief nor the inventor declarations even use the word “odd.”

AHG’s failure to address the merits of Broetje’s “odd number” best mode defense may, by itself, provide a basis to grant Broetje summary judgment. *See New Shah, Inc. v. Shah*, 2000 WL 1728251, *3 (D. Del. 2000) (“To the extent Plaintiffs did not intend to abandon these claims, the court finds that they have done so by failing to respond to apparently meritorious arguments raised in Shah’s opening brief.”). Plainly, AHG’s merely conclusory denial in its answering brief – that paragraphs 7-9 of Broetje’s opening brief, which set out the details of the “odd number” best mode theory, are not “undisputed facts” (D.I. 223 at 2) – is inadequate to defeat summary judgment. *See Anderson*, 477 U.S. at 257 (“[T]he plaintiff must present affirmative evidence in order to defeat a properly supported motion for summary judgment.”); *El v. SEPTA*, 479 F.3d 232, 238 (3d Cir. 2007) (“The non-moving party . . . must point to actual evidence in the record on which a jury could decide an issue of fact its way.”); *Barmag Barmer Maschinenfabrik AG. v. Murata Machinery, Ltd.*, 731 F.2d 831, 836 (Fed. Cir.1984) (“The party opposing the [summary judgment] motion must point to an evidentiary conflict created on the record at least by a counter statement of a fact or facts set forth in detail in an affidavit by a knowledgeable affiant. Mere denials or conclusory statements are insufficient.”); *Jersey Cent. Power & Light Co. v. Lacey Tp.*, 772 F.2d 1103, 1109-10 (3d Cir. 1985) (“Legal memoranda and

oral argument are not evidence and cannot by themselves create a factual dispute sufficient to defeat a summary judgment motion.”); *SEC v. Bonastia*, 614 F.2d 908, 914 (3d Cir. 1980) (“Denials in the form of legal conclusions, unsupported by documentation of specific facts, are insufficient to create issues of material fact that would preclude summary judgment.”).

Notwithstanding AHG’s failure to contest the “odd number” theory in its briefing and affidavits, the Court directed the submission of the entirety of the inventors’ depositions, and then scrutinized these transcripts for evidence of a genuine dispute of material fact relating to the “odd number” defense. As explained below, the Court found no such disputed fact, rendering summary judgment appropriate. *See generally B & G Enterprises, Ltd. v. U.S.*, 220 F.3d 1318, 1322 (Fed. Cir. 2000) (“Summary judgment is particularly appropriate here. There are no material facts in dispute. The only issue is legal.”); *Mid-Jersey Nat. Bank v. Fidelity-Mortgage Investors*, 518 F.2d 640, 644-45 (3d Cir. 1975) (finding district court was correct in granting summary judgment where case involved “a legal, not a factual, dispute”).

a. First Prong – Possession of Best Mode as of Relevant Filing Date

AHG fails to raise a genuine dispute of material fact concerning the first prong of the best mode inquiry, which involves a subjective assessment of whether, at the time of the effective filing date, an inventor in fact possessed a best mode of practicing the claimed invention. The Court has reviewed the inventors’ deposition testimony and finds no material dispute that, as of the relevant filing date, Mr. Auriol believed that an “odd number” of grooves was necessary to carry out the claimed invention. Contrary to AHG’s assertion, Mr. Auriol offered clear, convincing, and undisputed deposition testimony that he was aware of the “odd number” best mode before the French priority application was filed in December 1988.

Mr. Auriol testified that he was “the one who thought out the grooves,” and the “first tests were done before [AHG] filed for the patent.” (Auriol Dep. at 34-35) Specifically, Mr. Auriol explained that “[s]everal months” before the French priority application was filed in December 1988, he had performed tests using 100-meter tubes with grooves that had been manufactured using the “machining” technique. (*Id.* at 35-36) When asked about the configuration of the “tube that [he] machined to put grooves into back in 1988,” he stated that those tubes “had three grooves” because “[i]f we only had two grooves, there was a chance that the rivet would rotate on itself.” (*Id.* at 43-44) Consistent with that testimony, Mr. Auriol further stated that he was aware “from the very beginning” that one would “need an odd number” of grooves for the invention to function properly, so as “[t]o avoid that the rivet turns on itself.” (*Id.* at 40, 44)⁷

Hence, there is no genuine dispute of material fact that Mr. Auriol was in possession of the “odd number” best mode for carrying out his invention as of the relevant filing date. *See Bayer*, 301 F.3d at 1319 (stating best mode violation occurs “when the patentee failed to disclose aspects of making or using the claimed invention and the undisclosed matter materially affected the properties of the claimed invention”); *Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059, 1065 (Fed. Cir. 1998) (affirming best mode invalidation where patentee was “aware that a variety of undisclosed machining parameters were critical to the production of a functional [device]”); *Wahl Instruments, Inc. v. Acvious, Inc.*, 950 F.2d 1575, 1579-80 (Fed. Cir. 1991)

⁷Mr. Bornes’ deposition testimony corroborates Mr. Auriol’s testimony concerning the nature and timing of the 1988 testing. When asked “what kind of tests did you and Mr. Auriol perform back in the 1980s to determine what would work,” Mr. Bornes responded that “[t]he idea was to create grooves, so we created tubes with grooves” up to 100 meters in length, which had been created using a “machine” to rifle grooves inside the tubes. (Bornes Dep. at 49-50)

(stating best mode invalidity may result where an inventor fails to disclose a “particular method of making which substantially improves the operation or effectiveness of his invention”).⁸

b. Second Prong – Objective Concealment of Best Mode

AHG also fails to raise a genuine dispute of material fact with respect to the second prong of the best mode inquiry, which involves an objective determination as to whether an inventor has “concealed” his or her contemplated best mode from the public. *See Wellman*, 642 F.3d at 1360. Broetje contends that the patents-in-suit never discuss or explain Mr. Auriol’s subjective belief that one would “need an odd number” of grooves to successfully practice the claimed invention and avoid the rivet rotation and jamming frequently encountered with an even number of grooves, a difficulty that the inventors encountered with their two-groove embodiment.

As already noted, AHG does not dispute this fact, but instead attempts to avoid summary judgment by arguing that “the test of whether the odd number is disclosed here depends on what *one skilled in the art* would have understood at the [relevant] time period.” (D.I. 315) But AHG has offered no *evidence* that one having ordinary skill in the art would read the specifications of

⁸During his deposition, Mr. Auriol testified that the inventors’ 1988 testing occurred “before or during the filing of the patent.” (Auriol Dep. at 35-36) In viewing the evidence and drawing all reasonable inferences in AHG’s favor, the Court has considered whether Mr. Auriol’s ambiguous use of the word “during” is sufficient to raise a genuine dispute as to whether Mr. Auriol’s discovery of the “odd number” best mode may have occurred “after” the filing date. The Court concludes that this abstract, speculative possibility does not rise to the level of a genuinely disputed material fact, and instead amounts to a mere “metaphysical doubt” or “scintilla” of evidence that does not preclude summary judgment. Mr. Auriol unambiguously testified elsewhere in his deposition that the testing process began “several months” before December 1988, and that it was “from the very beginning” of that process that he realized an odd number of grooves was best. (*Id.* at 36, 43-44) Moreover, of course, neither AHG’s brief nor Mr. Auriol’s declaration contend that Mr. Auriol’s deposition testimony about “during the filing” creates a material dispute of fact with respect to the “odd number” theory.

the patents-in-suit and divine therefrom that an odd number of rivets is best. “Unsubstantiated attorney argument regarding the meaning of technical evidence” does not satisfy a party’s burden on summary judgment. *Invitrogen Corp. v. Clontech Labs, Inc.*, 429 F.3d 1052, 1068 (Fed. Cir. 2005); *see also Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 424 F.3d 1276, 1284 (Fed. Cir. 2005) (“Attorney argument is no substitute for evidence.”). AHG has offered no evidence, and has made no meaningful comparison, between the facts known to Mr. Auriol and the disclosure in the specification, nor has AHG shown (or even explained) how or why that disclosure is adequate in view of the level of skill in the art. AHG’s showing has been wholly inadequate, as “the best mode disclosure requirement . . . cannot be met by mute reference to the knowledge of one of skill in the art,” *Bayer*, 301 F.3d at 1314, particularly where, as here, the allegedly concealed information relates to the purportedly patentably distinct aspects of the claimed invention.⁹

Although AHG’s sparse treatment of the “odd number” best mode theory in its briefing and at oral argument never explicitly identifies any specific evidence or reasons that a reasonable factfinder could find in AHG’s favor on the issue of concealment, it appears that AHG is implying that the disclosure of a lone embodiment containing “three” grooves adequately

⁹To the extent AHG argues summary judgment must be denied simply because Broetje did not submit any expert testimony (D.I. 315), that argument is also without merit. Broetje met its initial burden on summary judgment by pointing out that the patents-in-suit never describe or explain the *necessity* of using an odd number of grooves, a point which AHG does not dispute. Moreover, expert testimony is unnecessary here because the parties’ dispute revolves around the simple concept of odd versus even numbers. *See Centricut, LLC v. Esab Group, Inc.*, 390 F.3d 1361, 1369 (Fed. Cir. 2004) (“In many patent cases expert testimony will not be necessary because the technology will be easily understandable without the need for expert explanatory testimony.”) (internal quotations and citations omitted); *Kyocera Wireless Co. v. President Elecs., Ltd.*, 179 Fed. Appx. 53, 54 (Fed. Cir. 2004) (“To the extent that Mr. Colida argues that summary judgment was improper without expert testimony, that argument is without merit. . . . expert evidence is not always necessary to resolve questions of patent infringement.”).

discloses Mr. Auriol's contemplated "odd number" best mode, presumably since three is an "odd number." (See generally Auriol Dep. at 69) For example, AHG contends "[t]here is no requirement in 35 USC 112 that an applicant point out which embodiments he considers his best mode; that the disclosure includes the best mode contemplated by the applicant is enough." (D.I. 315) (quoting *Randomex, Inc. v. Scopus Corp.*, 849 F.2d 585, 589 (Fed. Cir. 1988)) Although AHG is correct that inventors are not required to distinctly "point out" the best mode from other disclosed embodiments, the best mode nonetheless must be adequately disclosed in the first instance. Here, that was not done.¹⁰

In short, the "appropriate question . . . is not whether the inventors disclosed [an odd number of grooves] *at all* – they did – but whether [the odd number best mode] was *adequately* disclosed. Even though there may be a general reference to the best mode, the quality of disclosure may be so poor as to effectively result in concealment." *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1536 (Fed. Cir. 1987) (internal citations omitted; emphasis added). Thus, the mere fact that AHG has disclosed an odd number "at all" does not mean that the specification "adequately" discloses Mr. Auriol's odd-number best mode. AHG's identification of a lone embodiment that happens to share a trait in common with the inventor's best mode is insufficient, without more, to avoid summary judgment.

Instead, the record evidence demonstrates that Mr. Auriol's "odd number" best mode was

¹⁰In *Randomex*, the Federal Circuit held that the best mode *was* adequately disclosed because the specification contained a "generic description" of the preferred cleaning fluid that "disclosed the contents of the fluid" as the same solution already "used in the prior art," for which "commercial substitutes were readily available in the prior art." Thus, disclosure of the exact formula for the preferred cleaning fluid was deemed unnecessary, particularly where the cleaning fluid was not a patentably distinct aspect of the invention at hand, which "neither added or claimed to add anything to the prior art respecting cleaning fluid." 849 F.2d at 589-90. None of those considerations apply to Mr. Auriol's "odd number" best mode.

improperly concealed. As AHG concedes, the '339 and '216 patents never explain the importance or necessity of using an “odd number” of grooves. (*Compare* D.I. 163 at 9 with D.I. 223 at 4) Nor do the patents indicate that the most commonly disclosed embodiment – tubes containing two grooves – was known by Mr. Auriol to be an inferior configuration prone to failure as a result of rivet rotation and jamming within the tube. (*Id.*) AHG effectively concedes Broetje’s characterization that the patents-in-suit disclose “two tubes with 2 grooves, one tube with 3 grooves, and one tube with about 50 grooves.” (D.I. 163 at 8; D.I. 223 at 4) (“The '339 patent included four examples of embodiments of grooves of differing numbers, *as Broetje notes.*”) (emphasis added) In addition, the specification contains explicit language indicating that the patents-in-suit are “intended to cover any and all variations, modifications and adaptations which fall within the spirit of the invention,” which in the context of the patents-in-suit would include odd- and even-numbered amounts of grooves. *See, e.g.,* '339 patent at col.6 ll.50-57.

The facts here are quite similar to those in *Dana Corp. v. IPC Ltd. Partnership*, 860 F.2d 415 (Fed. Cir. 1988), in which the Federal Circuit granted judgment as a matter of law that the patents were invalid for failure to disclose the best mode. The evidence in that case showed that the use of a fluoride treatment was “necessary” for the “satisfactory performance” of the claimed invention; “[n]owhere in the specification, however, does the inventor disclose that a fluoride treatment must or even should be applied.” *Id.* at 418, 420. The same is true here. Mr. Auriol clearly testified that one would “need an odd number” of grooves for the satisfactory performance of the invention, because otherwise rivet rotation and jamming would result. (Auriol Dep. at 40, 44) But nothing to this effect is discernable from the patents themselves.

Finally, the Court notes that AHG’s request that summary judgment be denied simply so

that “in fairness the inventors (both French speaking) may be heard and observed responding to questions” (D.I. 315) is not a proper basis for denying summary judgment. If a party could defeat summary judgment simply by offering or speculating as to possible witness testimony at trial, then summary judgment could never be granted. Notably, both inventors, although French-speaking, had interpreters with them during their depositions.

In sum, the Court concludes that Broetje has made an undisputed showing by clear and convincing evidence that the disclosures of the patents-in-suit are “so objectively inadequate as to *effectively* conceal the best mode from the public,” such that a reasonable jury could not find in AHG’s favor with respect to Broetje’s “odd number” theory. *U.S. Gypsum*, 74 F.3d at 1215; *see also Transco*, 38 F.3d at 560 (“Even where there is a general reference to the best mode of practicing the claimed invention, the quality of the disclosure may be so poor as to effectively conceal it.”). Because the only reasonable conclusion is that Mr. Auriol was in possession of his “odd number” best mode as of the relevant filing date, and it was not adequately disclosed in the patents-in-suit, the Court finds that the asserted claims violate the best mode requirement set forth at 35 U.S.C. § 112 ¶ 1.

III. Remaining Motions

On September 23, 2011, the Court held a teleconference to consider the parties’ positions as to how this case should proceed in light of the Court’s grant of Defendants’ motion for summary judgment relating to the best mode defense. During the teleconference, the Court granted Plaintiffs’ request that it cancel the trial on its remaining non-patent causes of action, which was then scheduled to begin on September 26, 2011. The Court further agreed with Plaintiffs’ request to put this case in a posture so that appellate review of the Court’s best mode ruling may be possible before the non-patent causes of action go to trial.

In addition to Plaintiffs' cross-motion to strike, there are eight (8) motions still pending. (D.I. 141, 153, 156, 176, 181, 265-67) As set forth in a separate Order issued today, the Court is denying without prejudice all such motions, with the exception of Defendants' motion challenging the Court's subject matter jurisdiction with respect to the '339 patent. In doing so, the Court intends to preserve both sides' rights to renew the denied motions following Federal Circuit review of the Court's best mode ruling, to the extent the issues raised in the pending motions are relevant to further post-appeal proceedings in this matter.

The parties are reminded that during the teleconference the Court directed them to submit, by September 30, 2011, a proposed form of Order to effectuate the appellate review requested by Plaintiffs. At the same time, the parties should provide the Court with guidance on the entry of judgment in connection with the '339 patent in view of Defendants' motion to dismiss challenging this Court's subject matter jurisdiction with respect to that patent.

CONCLUSION

"While it is true that a court must draw all reasonable inferences in favor of the nonmoving party" when viewing the evidence on summary judgment, here AHG has "presented no evidence" in support of its opposition, and has offered only "arguments and perhaps a suggestion of what [it] might present at trial; that alone is insufficient to meet its burden of production," as "[a]ttorney argument is no substitute for evidence." *Enzo Biochem*, 424 F.3d at 1284. It was incumbent upon AHG to come forward with specific facts and actual evidence establishing a genuine factual dispute under either prong of Broetje's "odd number" best mode defense, but AHG failed to do so. Thus, and for the additional reasons explained in this Opinion, the Court has granted Broetje's motion for summary judgment of invalidity for failure to disclose best mode.