

**United States Court of Appeals
for the Federal Circuit**

**ATELIERS DE LA HAUTE-GARONNE
AND F2C2 SYSTEMS SAS,**
Plaintiffs-Appellants,

v.

**BROETJE AUTOMATION USA INC.
AND BRÖETJE AUTOMATION GMBH,**
Defendants-Cross Appellants.

2012-1038,-1077

Appeals from the United States District Court for the District of Delaware in No. 09-CV-0598, Judge Leonard P. Stark.

Decided: May 21, 2013

SCOTT G. LINDVALL, Kaye Scholer, LLP, of New York, New York, argued for plaintiffs-appellants. With him on the brief was SARAH W. SAUNDERS.

PATRICK J. KELLEHER, Drinker Biddle & Reath LLP, of Chicago, Illinois, argued for defendants-cross appellants. With him on the brief were DARREN S. CAHR, and CARRIE A. BEYER.

Before NEWMAN, PROST, and REYNA, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* NEWMAN.

Dissenting opinion filed by *Circuit Judge* PROST.

NEWMAN, *Circuit Judge*.

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”), asserting counts of patent infringement, trade dress infringement, unfair competition, and intentional interference with prospective economic advantage. Ateliers de la Haute-Garonne is a French company whose employees include Jean-Marc Auriol and Philippe Bornes, the inventors of the patents in suit.

AHG asserted two patents, United States Patent No. 5,011,339 (“the ’339 patent”) issued April 30, 1991, and No. 5,143,216 (“the ’216 patent”) issued September 1, 1992, both entitled “Process for Distribution of Pieces such as Rivets, and Apparatus for carrying out the Process.” AHG alleged infringement of claims 1, 2, 3, and 6 of the ’339 patent and claims 1, 2, and 6 of the ’216 patent. The patents claim priority to a French application filed on December 8, 1988, and relate to the dispensing of objects such as rivets through a pressurized tube with grooves along its inner surface, to provide a rapid and smooth supply of properly positioned rivets for such uses as the assembly of metal parts of aircraft. The invention “permits dispensing a very great number of pieces without risk of jamming in the tube and with a precise guiding permitting maintaining the alignment of the axes of the pieces.” Abstract, ’339 patent, ’216 patent.

On Broetje's motion for summary judgment, the district court ruled, on September 26, 2011, that the claims in suit are invalid for failure to disclose the best mode of carrying out the invention, as required by 35 USC §112 ¶1.¹ Judgment was entered under Federal Rule 54(b); the court did not decide the other issues in the complaint, except for, on October 13, 2011, rejecting Broetje's argument that AHG abandoned the '339 patent by failing to pay the issue fee.²

AHG appeals the judgment of invalidity on best mode grounds. Broetje cross-appeals, stating that the patent was abandoned. We reverse the judgment of invalidity, affirm that the patent was not abandoned, and remand for determination of the remaining issues.

I

THE BEST MODE

A

The specifications of the '339 and '216 patents include several drawings of embodiments of the grooved tube, and describe the operation of the invention as follows:

According to the present invention, the compressed fluid is admitted into the tube behind the last piece and is distributed along the length of

¹ *Ateliers de la Haute-Garonne v. Broetje Automation-USA Inc.*, 817 F. Supp. 2d 394 (D. Del. 2011) ("Sept. Op."); *Ateliers de la Haute-Garonne v. Broetje Automation-USA Inc.*, No. 09-598 (D. Del. 2011) (order granting summary judgment for failure to disclose best mode) ("Order").

² *Ateliers de la Haute-Garrone v. Broetje Automation-USA Inc.*, 819 F. Supp. 2d 389 (D. Del. 2011) ("Oct. Op.").

the tube at the interior of at least one longitudinal passageway provided on the internal surface of said tube for opening into the hollow core thereof, such that the fluid pressure is exerted all along the hollow core in the spaces separating said pieces.

'339 patent, col.2 ll.35-42.

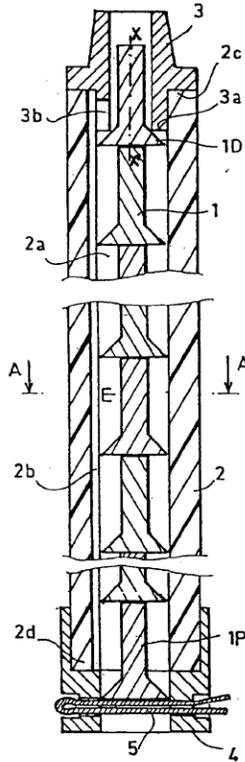
Claim 1 of the '339 patent follows, with numbers and letters that refer to the drawings, as exemplified in Figures 1 and 2:

1. A process for dispensing identical pieces having a symmetry of revolution about an axis, comprising: providing a tube **(2)** having a hollow center **(2a)** and a shape corresponding to the transverse section of the greatest diameter of the pieces for assuring a peripheral guiding of said pieces at the level of this section, arranging the pieces one after another in the interior of the tube **(2)** with their axes of revolution extending along the longitudinal axis of said tube and feeding one end of said tube with a compressed fluid for assuring the transfer of the pieces toward an open dispensing end **(2d)** of said tube, admitting the compressed fluid into the one end of the tube behind the piece closest to said one end of the tube and distributing the fluid along the length of the tube through at least one longitudinal passageway **(2b)** on the internal surface of said tube and opening into the hollow center **(2a)** thereof for exerting the pressure of the fluid along the hollow center in the spaces **(E)** between the pieces, to the piece **(1P)** closest to the dispensing end on which said pressure acts for assuring the transfer toward the dispensing end **(2d)**.

The specification defines "longitudinal passageway" as "a passageway extending in the direction of the length of the tube." '339 patent, col.5 ll.59-61. The issue of "best mode"

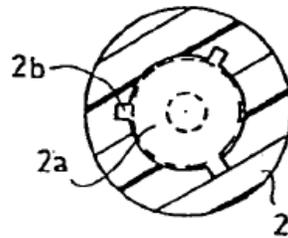
relates to the number of such passageways or grooves, illustrated at 2b in Figures 1 and 2:

Fig. 1



A transverse sectional view of the tube is shown in Figure 2, which is described as a Preferred Embodiment:

Fig. 2



The specification states:

On the internal surface of the tube **2** are arranged three passageways such as **2b**, angularly arranged at 120°, and which extend along the length of the tube. Each of these passageways opens into the hollow center **2a** of the tube along the length thereof.

'339 patent, col.4 ll.44-48. The specification also includes drawings showing two grooves and multiple grooves.

Broetje, by motion for summary judgment, argued that the patents do not adequately disclose the inventors' beliefs concerning the best mode, citing the following deposition testimony of inventor Auriol:

Q. Looking at [Figure] 2, does that also show the grooves?

A. Yes.

Q. And how many are there?

A. Three. You need an odd number.

Q. Why is that?

A. To avoid that the rivet turns on itself.

Q. Rotates?

A. So as to avoid that the stem of the rivets rotates too easily on itself.

Q. The tube that you machined to put grooves into back in 1988, can you remember what configuration or shape the inside of the tube had?

A. We had three grooves, just like this, because for machining purposes it was easier to have just three. If we only had two grooves, there was a chance that the rivet would rotate on itself inside the tube because the stem of the rivet might go inside one of the grooves.

Q. Okay. Do you remember when you learned that you needed an odd number of grooves?

A. We realized that from the very beginning because it kept -- if you have a groove here and you have a chance that the rivet might flip this way, if the rivet is very long, it will never rotate on itself. There won't be an issue. But the problem is that you need to manage that relatively short rivets will not rotate, and to that end, of course, you don't want them -- you don't want to give them an opportunity to go through it. And with an odd number of grooves, you're going to have the head of the rivet that's going to -- going to carry on to rest on the two grooves, and therefore, the stem of the rivet won't be able to -- won't be able to go through in order to make sure that the rivet won't rotate.

Auriol Dep. 40-45, July 29, 2011 (translation from French).

Inventors Auriol and Bornes provided sworn declarations stating that during development of the invention they tried different numbers of grooves and that "At the time of the foregoing patent applications . . . we were mostly using three grooves. Sometimes and depending on the size of rivets, we used four or five grooves." Auriol Decl. Sept. 1, 2011; Bornes Decl. Sept. 1, 2011.

Based on the inventors' testimony, Broetje moved for summary judgment of invalidity for failure to disclose the best mode. Broetje argued that "Mr. Auriol's testimony was clear that he considered an odd number of grooves to be the best mode of carrying out the invention." Broetje Summ. J. Br. No. 6 at 9. Broetje also argued: "The patents-in-suit do not *adequately* disclose what Mr. Auriol believed [w]as [t]he best mode. It is indisputable that the

patents-in-suit *never* say that use of an odd number of tubes is best.” *Id.* (emphases in original).

AHG responded that three grooves was the best mode known to the inventors when the application was filed, and that the three-groove embodiment was specifically described and thus adequately disclosed in the specification’s text and drawings. AHG stated that there was no concealment of a better mode than the three-groove embodiment shown in Figure 2, and that nothing in the inventors’ testimony departed from the description in the specification. AHG stated that the patents identified a “preferred embodiment” as having three grooves, that the patents correctly stated that other numbers of grooves may be used, and that no better mode was known to the inventors than was described in the specification.

The district court referred to Mr. Auriol’s testimony that an odd number of grooves is needed, and observed that the patent does not state that an odd number of grooves is better than an even number. The district court concluded that “inventor Mr. Auriol, possessed a best mode of practicing the claimed invention (i.e., an odd number of grooves) and did not adequately disclose this best mode in the specification.” Order at 2. The court found that AHG had presented no evidence that a person of ordinary skill, on reading the specification, would know that an odd number of grooves is better than an even number, as inventor Auriol testified. The court stated, “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.” Sept. Op. at 21 (quoting *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1536 (Fed. Cir. 1987)). The court thus concluded that “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.” *Id.*

In its summary judgment determination the district court stated that “the clear weight of Federal Circuit authority holds that intentional concealment is *not* required for best mode violations” *Id.* at 11 (emphasis in original). The court concluded that 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” and granted the Broetje motion for summary judgment. Sept. Op. at 23 (quoting *U.S. Gypsum Co. v. Nat’l Gypsum Co.*, 74 F.3d 1209, 1215 (Fed. Cir. 1996)) (emphasis in original).

B

An issue may be decided by summary judgment when no question of material fact is in dispute, *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 251-52 (1986), or when the nonmovant cannot prevail as a matter of law, even on its view of the facts and evidence. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986); *Allied Colloids, Inc. v. American Cyanamid Co.*, 64 F.3d 1570, 1573 (Fed. Cir. 1995). The court must view the evidence in the light most favorable to the non-moving party. *Anderson*, 477 U.S. at 255. On appellate review of the grant of summary judgment, we apply the same standard as did the district court. *Seal-Flex, Inc. v. Athletic Track & Court Constr.*, 98 F.3d 1318, 1321 (Fed. Cir. 1996). To invalidate a patent on summary judgment, the moving party must submit such clear and convincing evidence of invalidity that no reasonable trier of fact could find otherwise. *Eli Lilly & Co. v. Barr Labs, Inc.*, 251 F.3d 955, 962 (Fed. Cir. 2001).

35 USC §112 ¶1 requires that the specification “shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.” To establish violation, it must be shown that the inventor possessed a better mode than was described in the patent, and that

such better mode was intentionally concealed. “First, the court must determine whether the inventor possessed a best mode of practicing the claimed invention at the time of filing the patent application. This first step is subjective and focuses on the inventor’s preference for a best mode of practicing the invention at the time of the application’s filing date. The second step is an objective inquiry to determine whether the inventor concealed from the public the best mode of practicing the invention.” *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 655 F.3d 1364, 1373 (Fed. Cir. 2011) (internal citations omitted). “If the inventor in fact contemplated such a preferred mode, the second part of the analysis compares what he knew with what he disclosed—is the disclosure adequate to enable one skilled in the art to practice the best mode or, in other words, has the inventor ‘concealed’ his preferred mode from the ‘public?’” *Chemcast Corp. v. Arco Indus. Corp.*, 913 F.2d 923, 928 (Fed. Cir. 1990).

Violation requires intentional concealment; innocent or inadvertent failure of disclosure does not of itself invalidate the patent. *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1365 (Fed. Cir. 2011) (“Invalidation based on a best mode violation requires that the inventor knew of and intentionally concealed a better mode than was disclosed.”) (quoting *High Concrete Structures, Inc. v. New Enter. Stone & Lime Co.*, 377 F.3d 1379, 1384 (Fed. Cir. 2004)); *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 381 F.3d 1371, 1378 (Fed. Cir. 2004) (“The best mode requirement differs from the enablement requirement, for failure to enable an invention will produce invalidity whether or not the omission was deliberate, whereas invalidity for omission of a better mode than was revealed requires knowledge of and concealment of that better mode.”); *Brooktree Corp. v. Advanced Micro Devices*, 977 F.2d 1555, 1575 (Fed. Cir. 1992) (“[V]iolation of the best mode requires intentional concealment of a better mode than was disclosed That which is included in an

issued patent is, *ipso facto*, not concealed.”); *Engel Indus., Inc. v. Lockformer Co.*, 946 F.2d 1528, 1531 (Fed. Cir. 1991) (“Patent invalidity for failure to set forth the best mode requires that (1) the inventors knew of a better mode of carrying out the claimed invention than they disclosed in the specification, and (2) the inventors concealed that better mode.”); *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384-85 (Fed. Cir. 1986) (“Because not complying with the best mode requirement amounts to concealing the preferred mode contemplated by the applicant at the time of filing, in order to find that the best mode requirement is not satisfied, it must be shown that the applicant knew of and concealed a better mode than he disclosed.”); *In re Sherwood*, 613 F.2d 809, 816 (CCPA 1980) (“[E]vidence of concealment (accidental or intentional) is to be considered.”); *In re Nelson*, 280 F.2d 172, 184 (CCPA 1960) *rev’d on other grounds*, *In re Kirk*, 376 F.2d 936 (CCPA 1967) (“There always exists, on the part of some people, a selfish desire to obtain patent protection without making a full disclosure, which the law, in the public interest, must guard against. Hence . . . the ‘best mode’ requirement does not permit an inventor to disclose only what he knows to be his second-best embodiment, retaining the best for himself.”)

The requirement that a best mode violation requires intentional concealment was set forth in *In re Gay*, 309 F.2d 769, 772 (CCPA 1962) where this court’s predecessor explained, “Manifestly, the sole purpose of [the best mode requirement] is to restrain inventors from applying for patents while at the same time concealing from the public preferred embodiments of their inventions which they have in fact conceived.”³

³ Broetje states that these decisions of precedent have been superseded by conflicting panel decisions. That is incorrect, for if conflict had arisen, the rule is that the earlier panel decision controls unless overruled en banc.

The district court erred in law, in stating that concealment occurred although the preferred embodiment was disclosed, and that any omission need not be intentional to invalidate the patent on best mode grounds. The issue here is not of written description or enablement or any other aspect of §112; the sole challenged aspect relates to the disclosure of the best mode, based on inventor Auriol's testimony that an odd number of grooves is better than an even number.

At the time the patent application was filed, the inventors primarily used a three-groove tube, as shown in Figure 2 and described as a preferred embodiment. The issue of compliance with the best mode requirement is focused on the inventor's belief at the time of filing the patent application. *Northern Telecom Ltd. v. Samsung Elecs. Co.*, 215 F.3d 1281, 1286 (Fed. Cir. 2000). The best mode requirement is satisfied when the inventor includes the preferred mode in the specification. "There is no requirement in 35 USC 112 that an applicant point out which of his embodiments he considers his best mode; that the disclosure includes the best mode contemplated by the applicant is enough to satisfy the statute." *Ran-*

Newell Cos. v. Kenney Mfg. Co., 864 F.2d 757, 765 (Fed. Cir. 1988).

Judge Prost in dissent argues that "*Sherwood*, not *In re Gay*, is the precedent we must follow because it is the latest opinion of the [CCPA]." Dissent at 3 n. 1. However, *In re Gay* was cited by the CCPA after *Sherwood*. See *U.S. Dep't of Energy v. Daugherty*, 687 F.2d 438, 446 (CCPA 1982) ("[A] strict 'best mode' issue involves knowledge of facts peculiarly within the possession and control of Daugherty, specifically, the state of mind of the Daugherty patentees at the time they filed their application. Were they deliberately concealing something? See *In re Gay*, [309 F.2d 769 (CCPA 1962)].").

domex, Inc. v. Scopus Corp., 849 F.2d 585, 589 (Fed. Cir. 1988).

The three-groove embodiment pictured in Figure 2 is described in the specification as a preferred embodiment. It is not disputed that the three-groove passageway was the best mode then known to the inventors. There was no evidence that they knew of a better mode. No inaccuracy or misleading information is identified. Although Broetje argues that the inventors had different theories of the best mode, it is not disputed that the preferred embodiment when the patent application was filed was the three-groove embodiment that the specification describes as preferred.

The inventors' testimony is in accord with the patents' disclosure. Mr. Auriol testified that "you need an odd number" of grooves, pointing to the three grooves in Figure 2 and explaining that "[i]f we only had two grooves, there was a chance that the rivet would rotate on itself inside the tube because the stem of the rivet might go inside one of the grooves." Auriol Dep. 44, July 29, 2011. He explained that "if the rivet is very long, it will never rotate on itself. There won't be an issue. But the problem is that you need to manage that relatively short rivets will not rotate" *Id.* Mr. Auriol and Mr. Bornes testified that "Sometimes and depending on the size of rivets, we used four or five grooves." Auriol Decl. Sept. 1, 2011; Bornes Decl. Sept. 1, 2011. The record states that this experimentation continued for several years after the patent application was filed.

The inventors testified that after several years of development a five-groove tube was selected for commercial sale. However, it was not disputed that at the time the patent application was filed, the three-groove tube was the preferred embodiment. The issue is whether the inventors knew of and deliberately concealed a better mode than they disclosed. *Wahl Instruments, Inc. v.*

Acvious, Inc., 950 F.2d 1575, 1579 (Fed. Cir. 1991) (“The purpose of the best mode requirement is to restrain inventors from applying for a patent while at the same time *concealing* from the public preferred embodiments of their inventions which they have in fact conceived.”) (emphasis in original). In *Randomex* the court reiterated that “[i]t is concealment of the best mode of practicing the claimed invention that section 112 ¶ 1 is designed to prohibit.” 849 F.2d at 588. There was no evidence that either Mr. Auriol or Mr. Bornes possessed and concealed a better embodiment than was described in the specification.

The general statement that an odd number is better than an even number is not a statement of a better mode than the preferred embodiment shown in the specification. There was no evidence of intentional concealment of a better mode than was disclosed. The preferred embodiment’s disclosure of a three-groove tube is adequate to enable a person skilled in this art to practice the best mode. The judgment of invalidity on this ground is reversed.

II

ABANDONMENT

Broetje on cross-appeal states that the ’339 patent was abandoned by failure to pay the issue fee. The district court rejected this argument, finding that AHG had “established, by a preponderance of the evidence, that the issue fee was paid, and, hence, that the ’339 patent was not abandoned.” Oct. Op. at 391.

Broetje again argues that the issue fee was not paid, based on the following events: On January 23, 1991, AHG’s attorney sent a check to the Patent and Trademark Office for “SN 07/447,501 – Issue Fee.” The check did not clear, for “insufficient funds.” On May 8, 1991, the PTO notified the attorney of the returned check, and

advised that “the Applicant may wish to consider filing a petition to the Commissioner under 37 CFR 1.316(b) or (c) requesting the acceptance of delayed payment of the issue fee.” On May 15, 1991 the attorney wrote to AHG, explaining the situation and stating that “the matter was immediately rectified.”

All ensuing events are consistent with payment of the fee, for the patent was not withdrawn by the PTO, and the PTO accepted all subsequent maintenance fees. Broetje’s only argument is that the record does not contain a “petition to revive an abandoned application.” However, there is no record of an abandoned application. The district court found that the issue fee was paid and therefore the ’339 patent was not abandoned. Clear error has not been shown in this finding and conclusion.

CONCLUSION

The judgment of invalidity on best mode grounds is reversed. The ruling that the ’339 patent was not abandoned is affirmed. The case is remanded for further proceedings.

**REVERSED IN PART, AFFIRMED IN PART, AND
REMANDED**

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2012-1038,-1077

Appeals from the United States District Court for the District of Delaware in No. 09-CV-0598, Judge Leonard P. Stark.

PROST, *Circuit Judge*, dissenting.

The majority reverses the district court's summary judgment because it believes the court committed legal error by not requiring "intentional concealment" of a best mode and by ignoring the disclosure of a particular embodiment of the invention. The majority's decision, however, is itself based on an error of law. It is not in accord with our precedent regarding intent in a best mode analysis and misconstrues as legal error the district court's reasonable conclusion that the best mode the inventors possessed—an issue of fact—was not a disclosed embodi-

ment. Because I do not see any error of law in the district court’s opinion and agree with its conclusions on the relevant factual issues, I respectfully dissent.

A. INTENT

The majority holds that a “[v]iolation [of the best mode requirement] requires *intentional* concealment.” Majority Op. at 10 (emphasis added). It therefore concludes that the district court “erred in law” by finding intent an unnecessary element of a best mode violation. *Id.* at 12. To reach that conclusion, it relies on *Brooktree Corp. v. Advanced Micro Devices* as the earliest case that holds that concealment must be “intentional.” 977 F.2d 1555, 1575 (Fed. Cir. 1992). However, the statement in *Brooktree* concerning intentional concealment was dicta and clearly conflicted with our precedent at the time—which repeatedly emphasized that “concealment” need not be intentional.¹ Indeed, even the case cited in *Brooktree*

¹ See, e.g., *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1535-36 (Fed. Cir. 1987) (recognizing that “concealment” can be accidental or intentional and that an even a deliberate attempt to conform with the best mode requirement can fail if the “quality of the disclosure [is] . . . so poor as to effectively result in concealment”); *Dana Corp. v. IPC Ltd. P’ship*, 860 F.2d 415, 418 (Fed. Cir. 1988) (recognizing that “concealment” can be accidental or intentional and also finding best mode violation without any reference to “intent”); *DeGeorge v. Bernier*, 768 F.2d 1318, 1324 (Fed. Cir. 1985) (recognizing that “concealment” can be accidental or intentional); *Matter of Application of Sherwood*, 613 F.2d 809, 816 (CCPA 1980) (holding that “evidence of concealment (accidental or intentional) is to be considered”).

Oddly, the majority quotes yet wholly ignores the statement in *Sherwood* that concealment can be “accidental or intentional.” *Sherwood*, 613 F.2d at 816 (em-

for support, *Engel Industries v. Lockformer* (also cited by the majority), does not contain a single statement or implication that concealment must be “intentional.” See 946 F.2d 1528, 1531 (Fed. Cir. 1991). Moreover, as the Appellee Broetje submits, this court has repeatedly acknowledged the error in the *Brooktree* dicta and recognized that we are bound to follow our earlier precedent that intent is not an element of a best mode violation.² Accordingly, in my view, there is no basis to reverse the

phasis added). Instead, the majority focuses on what concealment might mean only in light of *In re Gay*, 309 F.2d 769, 772 (CCPA 1962). However, *Sherwood*, not *In re Gay*, is the precedent we must follow because it is the latest opinion of the Court of Customs and Patent Appeals (“CCPA”). *In re Gosteli*, 872 F.2d 1008, 1011 (Fed. Cir. 1989) (holding that “[t]he CCPA’s later decisions control because that court always sat en banc”).

² *U.S. Gypsum Co. v. Nat’l Gypsum Co.*, 74 F.3d 1209, 1215-16 & n.7 (Fed. Cir. 1996) (holding that intent is not required for a best mode violation and noting that the discussion of intent in *Brooktree* was dicta); see also, e.g., *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1085 (Fed. Cir. 2012) (holding that “the proper inquiry [in a best mode analysis] focuses on the adequacy of the disclosure rather than motivation for any nondisclosure”), *cert. denied*, 133 S. Ct. 933 (2013); *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 655 F.3d 1364, 1373 (Fed. Cir. 2011); *Graco, Inc. v. Binks Mfg. Co.*, 60 F.3d 785, 789-90 (Fed. Cir. 1995) (holding that “specific intent to deceive is not a required element of a best mode defense”). Indeed, the majority acknowledges that “earlier panel decision[s] control[] unless overruled en banc,” but they apparently believe *Brooktree* to be first in time. Majority Op. at 11 n.3 (citing *Newell Cos. v. Kenny Mfg. Co.*, 864 F.2d 757, 765 (Fed. Cir. 1988)).

district court for properly concluding that a best mode violation does not require an intent to “conceal.”³

B. DISCLOSURE OF A PREFERRED EMBODIMENT

The majority also concludes that the district court legally erred because the best mode of the invention was a tube with three grooves and the inventors disclosed a three-grooved preferred embodiment in the patents. *See* Majority Op. at 12-14. Assuming arguendo that the majority is correct that a three-grooved tube was the best mode and was disclosed as an embodiment,⁴ the inven-

³ To support its holding that concealment must be intentional, the majority relies on three of our more recent opinions, *Wellman, Inc. v. Eastman Chemical Co.*, 642 F.3d 1355, 1365 (Fed. Cir. 2011), *High Concrete Structures, Inc. v. New Enterprise Stone & Lime Co.*, 377 F.3d 1379, 1384 (Fed. Cir. 2004), and *Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc.*, 381 F.3d 1371, 1378 (Fed. Cir. 2004). But that line of precedent adopts the intentional concealment requirement from *Brooktree* that we already expressly held in *U.S. Gypsum* to be non-binding (and erroneous) dicta. In my view, these cases clearly conflict with earlier precedent, which we are bound to follow, *see Newell*, 864 F.2d at 765, and have already been dispensed with in dozens of our cases that recognize that the concealment inquiry is objective, *see supra* note 2.

⁴ The majority declares that “[i]t is not disputed that [a] three groove passageway was the best mode.” Majority Op. at 13. The majority also claims that “it is not disputed that the preferred embodiment when the patent application was filed was the three-groove embodiment that the specification describes as preferred.” *Id.* The majority cites no support for those conclusions. I do not believe there is any. The identity of the best mode and the preference for the embodiments described in the

tors' disclosure in this case does not satisfy the best mode requirement.

The patents show at least four embodiments of the invention. None of those embodiments are specifically identified as the best mode of the invention and, except for falling under a general heading for preferred embodiments, none is specifically identified as preferred. Moreover, each of them appears to have different types and numbers of grooves: one has what appears to be fifty-five grooves, one has three grooves, and two have two grooves.

Thus, the inventors disclosed four embodiments of their invention, only one of which was a possible best mode. That fact alone probably would not lead me to find a best mode violation. But this case, and the inventors' disclosure, is not so simple. The inventors did not just disclose their best mode amongst many preferred embodiments; they buried it amongst many embodiments that they knew did not work. The inventors discovered that constructing their claimed tubing with a certain number of grooves did not just work better than another number of grooves but was "essential" to implementing their invention in order to prevent rivet rotation and jamming. J.A. 25-27; 101-104. As the district court discussed, preventing rivet rotation and jamming was allegedly a "patentably distinct" feature of the invention that was unsolved by the prior art. J.A. 27. And, as the inventors knew at the time of filing, a tube with two grooves would cause short rivets to jam because "the stem of the rivet might go inside one of the grooves." Auriol Dep. 44, July

patents are hotly contested questions in this appeal. And the answer to them formed the basis for the district court's decision that the best mode requirement was violated because the inventors' best mode was an "odd number" of grooves and that preference for that mode was not adequately disclosed in the patents.

29, 2011. So the inventors did not simply reveal their best mode and disclose others; they buried the best mode among other embodiments, also falling under the preferred embodiment heading, that did not include the “essential” feature that the inventors discovered and knew was necessary to successfully implement their invention. Such disclosure is not the “quid pro quo” demanded by the best mode requirement. See *Eli Lilly & Co. v. Barr Labs., Inc.*, 251 F.3d 955, 967 (Fed. Cir. 2001).

The majority arrives at the opposite conclusion by looking to our divided decision in *Randomex, Inc., v. Scopus Corp.*, 849 F.2d 585 (Fed. Cir. 1998). That case, however, supports the district court’s conclusion that there was a best mode violation here.

In *Randomex*, we recognized that, under the second prong of the best mode test, a disclosure can be “so poor as to effectively result in concealment.” *Id.* at 589 (quoting *Spectra-Physics*, 827 F.2d at 1535-36). We concluded, however, that the disclosure in that case was adequate to satisfy the best mode requirement based on the peculiar facts in the record. Specifically, we considered it important that the disclosure of the best mode cleaning fluid was mentioned along with just one other cleaning fluid, which was known in the prior art and understood by those of ordinary skill in the art to be “the ‘worst mode,’ not the ‘best,’” because it caused explosions. *Id.* In short, the court found that the disclosure in *Randomex* did not effectively result in concealment because it was still an adequate guide for one of ordinary skill in the art to determine which of the two disclosed embodiments was the best mode.

The disclosure here, however, is not an adequate guide that one of ordinary skill in the art could follow to determine the best mode for the invention. Unlike in *Randomex*, one of ordinary skill in the art would have to build and test three other systems—not just one—to tell

which was the best mode. And, in contrast to the well-known alternative embodiment disclosed in *Randomex*, the alternative embodiments disclosed here are not well-known in the prior art. Those of ordinary skill in the art had no way of knowing that the embodiments without three grooves were clearly inferior and should not be used because they might suffer from rivet rotation and jamming. The inventors knew that fact because they apparently were the first to discover it. Yet the inventors chose to not mention that “essential” quality of their invention in their disclosure and buried it amongst several embodiments. In contrast to *Randomex*, the inventors here not only left those of ordinary skill in the art without any guide as to the identity of best mode, the inventors *led them down the wrong path* by disclosing multiple other embodiments that only the inventors knew would not work well.

C. CONCLUSION

The inventors knew that a certain number of grooves was the best mode for implementing their invention. Whether that number was “odd” as the district court found or “three” as the majority concludes, the inventors did not adequately disclose it. Accordingly, the district court was correct to hold that the patents violated the best mode requirement.⁵

I respectfully dissent.

⁵ Even if the majority disagrees with my analysis of the facts in this case, I see no basis to *reverse* the decision of the district court. Compliance with the best mode requirement is a question of fact. To reverse the district court would require holding that no reasonable jury could find the facts as both the district court and I see them to be plainly laid out in the record. I do not believe that conclusion can be fairly reached on the record in this case.