United States Court of Appeals for the Federal Circuit

QUEST INTEGRITY USA, LLC,
Plaintiff-Appellant

v.

COKEBUSTERS USA INC.,
Defendant-Appellee

2017-2423

Appeal from the United States District Court for the District of Delaware in No. 1:14-cv-01483-SLR, Judge Sue L. Robinson.

Decided: May 21, 2019

MICHAEL A. MORIN, Latham & Watkins LLP, Washington, DC, argued for plaintiff-appellant. Also represented by GABRIEL BELL, ROBERT J. GAJARSA, MATTHEW J. MOORE, ABIGAIL A. RIVES.

THOMAS MARTIN FULKERSON, Fulkerson Lotz LLP, Houston, TX, argued for defendant-appellee. Also represented by DANIELLE J. HEALEY, Fish & Richardson, PC, Houston, TX.

Before DYK, TARANTO, and HUGHES, *Circuit Judges*.

DYK, *Circuit Judge*.

Quest Integrity USA, LLC ("Quest") appeals a judgment of the U.S. District Court for the District of Delaware in favor of Cokebusters USA Inc. ("Cokebusters"). On summary judgment, the district court held that claims 12, 24, 30, 33, and 40 of U.S. Patent No. 7,542,874 ("the '874 patent") were invalid under 35 U.S.C. § 102(b) because the claimed invention was offered for sale more than one year prior to the filing of the patent application. We conclude that the district court properly construed the claims and that claims 12, 24, and 33 are invalid based on this claim construction.

However, we also conclude that the district court erred in disregarding declarations of the inventors under the sham affidavit doctrine, and that Quest raised a genuine issue of material fact as to the validity of claims 30 and 40.

Accordingly, we affirm the judgment of invalidity as to claims 12, 24, and 33, reverse the judgment of invalidity as to claims 30 and 40, and remand for further proceedings.

BACKGROUND

I

Quest owns the '874 patent. The '874 patent relates to a system and method for displaying inspection data collected from certain commercial furnaces (e.g., a furnace used in a refinery). The '874 patent explains that "a furnace is generally comprised of several hundred to several thousand feet of serpentine tubing that is characterized by straight tube segments . . . interconnected by angled bends." '874 patent, col. 1, ll. 26–30. The bends allow the tube segments of the furnace to stack for maximum heat transfer and efficiency. The specification describes furnace tube inspection systems that existed in the art to identify furnace tubes in need of repair or replacement. In these systems, an inspection tool (referred to in the industry as a

"pig") would be inserted in one end of the furnace tubing from a launcher and "collect[] inspection data [(e.g., inside radius of the furnace, readings of the wall thickness of the furnace, and the like)] at pre-determined time intervals as [the tool] progresse[d] through the furnace" to a receiver at the other end of the furnace. *Id.* col. 1, ll. 49–59. The data could then be extracted from the inspection tool, converted to calibrated engineering units, and examined by an engineer in order to identify the location of flaws within the furnace (e.g., thinning or bulging of tubing).

The '874 patent attempts to improve upon how these prior art systems displayed the collected inspection data, but it does not purport to improve upon how furnace inspection data is collected or the type of data that is collected. The specification explains that the system of the '874 patent comprises "a storage device for storing the inspection data collected by an inspection tool flushed through the furnace" and a computer programmed to generate a plurality of data markers in relation to the inspection data, partition the inspection data at the data markers, and generate a display of the partitioned inspection data, "wherein the display is a two-dimensional or three-dimensional representation of one or more of the tube segments of the furnace." *Id.* col. 2, ll. 50–52; *id.* col. 3, ll. 25–27. Each data marker identifies the location of a physical feature of the furnace (e.g., a bend, an external raised surface, cross-over piping, a thermal well, a weld, a flange, a schedule change and/or a diameter change). "The [generated] display may be used to visually detect problem areas within the furnace . . . ." *Id.* col. 3, ll. 27–30. The '874 patent discloses various examples that "illustrate different approaches that may be used to correlate the inspection data to the physical geometry of the furnace and display the inspection data in a manner that enables the visual detection of problem areas within the furnace." *Id.* col. 9, ll. 43–47.

One category of claims at issue on appeal is claims 12, 24, and 33. Claims 12 and 33 are method claims, and claim 24 is a computer-readable medium claim. By way of example, claim 24 recites:

> 24. A computer-readable medium having computer-executable instructions for performing a method of displaying inspection data collected from a furnace, wherein said furnace comprises a plurality of tube segments interconnected by a plurality of bends so as to allow stacking of at least a portion of said tube segments, said method comprising:
>
> > generating a plurality of data markers each of which identifies a location of a physical feature of said furnace;
> >
> > partitioning said inspection data at said data markers so as to correlate said inspection data to an appropriate one of said tube segments of said furnace;
> >
> > generating a display of at least a portion of said partitioned inspection data arranged to represent said physical geometry of a plurality of said tube segments and enable visual detection of a problem area comprising one or more of said tube segments; and
> >
> > wherein said inspection data is collected by one or more devices selected from the following group: an ultrasonic transducer, a laser profilometer, and combinations thereof.

Id. col. 18, ll. 26–45 (emphases added). Claims 12 and 33 each recite a method for displaying furnace inspection data similar to the method performed by the computer-readable medium of claim 24.

There is another category of asserted claims at issue: claims 30 and 40. Claims 30 and 40 recite additional limitations. Claim 30, which depends from claims 24, 27, and 28, recites:

> 30. [A computer-readable medium having computer-executable instructions for performing a method of displaying inspection data collected from a furnace, wherein said furnace comprises a plurality of tube segments interconnected by a plurality of bends so as to allow stacking of at least a portion of said tube segments, said method comprising:
>
> generating a plurality of data markers each of which identifies a location of a physical feature of said furnace;
>
> partitioning said inspection data at said data markers so as to correlate said inspection data to an appropriate one of said tube segments of said furnace;
>
> generating a display of at least a portion of said partitioned inspection data arranged to represent said physical geometry of a plurality of said tube segments and enable visual detection of a problem area comprising one or more of said tube segments;
>
> wherein said inspection data is collected by one or more devices selected from the following group: an ultrasonic transducer, a laser profilometer, and combinations thereof;
>
> wherein said inspection data comprises a plurality of inspection readings selected from the following group: wall thickness readings of said furnace, inside radius readings of said furnace, and combinations thereof;

> wherein sensor data is also collected from said furnace, said sensor data comprising a plurality of sensor readings collected by one or more auxiliary sensors selected from the following group: an axial encoder, an accelerometer, a roll encoder, a gyroscope, an inertial navigation system, and combinations thereof; and]
>
> wherein each of said data markers comprises a composite data marker derived from a plurality of individual data markers.

Id. col. 19, ll. 4–6 (emphasis added); *see id.* col. 18, ll. 26–45, 54–65 (emphases added). The specification gives the example of composite data markers "that identify the locations of the furnace bends." *Id.* col. 12, l. 63. Independent claim 40 recites:

> 40. A system for displaying inspection data collected from a furnace with a specified physical geometry, wherein said furnace comprises a plurality of tube segments interconnected by a plurality of bends so as to allow stacking of at least a portion of said tube segments, said system comprising:
>
> a storage device for storing said inspection data and sensor data collected from said furnace; and
>
> a computer programmed to:
>
> analyze said sensor data and generate a plurality of data markers based upon said analysis of said sensor data, wherein each of said data markers identifies a location of a physical feature of said furnace so as to correlate said inspection

> data to said physical geometry of said furnace;
>
> partition said inspection data at said data markers;
>
> generate a display of at least a portion of said partitioned inspection data arranged to represent said physical geometry of a plurality of said tube segments and enable visual detection of a problem area comprising one or more of said tube segments; and
>
> wherein said sensor data comprises a plurality of readings collected by one or more auxiliary sensors selected from the following group: an axial encoder, an accelerometer, a roll encoder, a gyroscope, an inertial navigation system, and combinations thereof.

Id. col. 20, ll. 17–41 (emphases added). The '874 patent distinguishes between "inspection data" and "sensor data." Unlike the other asserted claims, claim 40 requires the analysis of "sensor data" (data from one or more auxiliary sensors) to generate data markers.

II

On December 15, 2014, Quest filed suit against Cokebusters in the District of Delaware, alleging infringement of the '874 patent. Cokebusters offers furnace cleaning and inspection services. Quest alleged that Cokebusters "mak[es], us[es], offer[s] for sale, or sell[s] products that infringe the '874 Patent," including Cokebusters's Merlin Tube Inspection PIG with Roxtail Software. J.A. 30009.

Cokebusters defended on the ground that the claims were invalid under 35 U.S.C. § 102(b) because there was a commercial sale of services that used the claimed methods, computer-readable media, and system more than one year before June 1, 2004, the date the application that led to the '874 patent was filed in the United States.[1]

The basis for the on-sale bar defense was an offer by Quest itself to provide furnace tube inspection services to a client in the petrochemical industry. In February and March 2003, Quest performed furnace tube inspection services for Orion Norco Refinery in Norco, Louisiana in exchange for $72,060 ("the Norco Sale"). Cokebusters alleged that these commercial activities rendered the claims invalid because of the on-sale bar. Cokebusters argued that during those inspections, Quest used its commercial furnace tube inspection method, computer-readable medium, and system and generated two inspection reports ("the Norco Reports"), which Quest provided to the customer. The Norco Reports contained two-dimensional, color-coded strip charts displaying the collected furnace inspection data ("the Norco Strip Charts"). Cokebusters alleged that the method, computer-readable medium, and system used to prepare the Norco Strip Charts satisfied the limitations of the asserted claims. Quest did not sell any hardware or software to the customer.

The district court held a claim construction hearing and construed various disputed claim terms. One of the claim terms is relevant to this appeal: "generating a display of at least a portion of said partitioned data arranged to represent said physical geometry of said tube segments and enable visual detection of a problem area comprising

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[1] Because the application that led to the '874 patent was filed before March 16, 2013, pre-AIA 35 U.S.C. § 102 applies here.

one or more of said tube segments." This limitation is required by claims 12, 24, and 30. Nearly identical language appears in claims 33 and 40. The parties refer to these limitations collectively as "the Display Limitation." The district court construed the Display Limitation as including strip charts, such as those described in Example 1 of the '874 patent, and concluded that Example 1 was not disclaimed during prosecution.

After claim construction, the parties filed various motions for summary judgment. As is pertinent here, Quest moved for summary judgment of no invalidity, and Cokebusters moved for summary judgment of invalidity. The district court held that the Norco Sale was a commercial sale and thus was prior art under § 102(b). The district court determined that the Norco Sale satisfied the Display Limitation, which appears in all of the asserted claims, because the Norco Strip Charts were the same as Example 1 in the '874 patent. For claims 12, 24, and 33, the dispute was over the Display Limitation, and thus the district court granted Cokebusters's motion for summary judgment of invalidity as to claims 12, 24, and 33.[2]

For claims 30 and 40, in addition to the Display Limitation, the question was whether the Norco Sale disclosed the additional claim limitations regarding generating "composite data marker[s]" (claim 30) and analyzing "sensor data" (claim 40). The district court concluded that there was no genuine issue of material fact as to whether the

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[2] As for claim 12, there was one additional claim limitation in dispute, which the district court resolved in Cokebusters's favor. Quest does not challenge that determination on appeal.

Norco Sale satisfied those limitations, and thus granted summary judgment of invalidity as to claims 30 and 40.[3]

The district court relied on deposition testimony of Robert De Lorenzo, a co-inventor of the '874 patent who conducted the furnace inspection for the Norco Sale and served as Quest's Federal Rule of Civil Procedure 30(b)(6) witness. At his deposition, De Lorenzo testified that the "composite data marker" and "sensor data" features of claims 30 and 40 were used in the Norco Sale. In granting summary judgment, the district court concluded that inventor declarations that Quest submitted from De Lorenzo and Phil Bondurant, another co-inventor of the '874 patent, which contradicted the earlier De Lorenzo testimony and stated that the Norco Sale did not, in fact, produce the Norco Reports using these features, were sham affidavits and declined to consider them.

The district court subsequently entered judgment under Federal Rule of Civil Procedure 54(b) in favor of Cokebusters.[4]

Quest appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

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[3] The district court originally "denied summary judgment [of invalidity for claim 40], in part, because eight pages of deposition testimony, to which defendant cited, was missing from the record." J.A. 50. Cokebusters filed a motion for reconsideration, attaching the missing pages. The district court granted the motion and held that the Norco Sale satisfied each limitation of claim 40.

[4] The district court bifurcated and stayed "all other issues, including Cokebusters'[s] counterclaim for declaratory relief that claim 40 of the '874 patent is not infringed" pending resolution of this appeal. J.A. 70.

DISCUSSION

We review a grant of summary judgment de novo. *Gemtron Corp. v. Saint-Gobain Corp.*, 572 F.3d 1371, 1379 (Fed. Cir. 2009). Summary judgment is appropriate when "there is no genuine issue as to any material fact and . . . the moving party is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c).

Section 102(b) prevents a person from receiving a patent if, "more than one year prior to the date of the application for patent in the United States," "the invention was . . . on sale" in the United States. This is known as the "on-sale bar." The date exactly one year prior to the date of the patent application is known as the critical date. As noted above, since the application for the '874 patent was filed on June 1, 2004, the critical date here is June 1, 2003.

The on-sale bar seeks to prevent "[a]ny attempt to use [the claimed invention] for a profit, and not by way of experiment," for more than one year before filing for a patent application. *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 65 (1998); *see Medicines Co. v. Hospira, Inc.*, 827 F.3d 1363, 1372, 1377 (Fed. Cir. 2016) (en banc) (collecting cases). And "[i]t is a condition upon an inventor's right to a patent that he shall not exploit his discovery competitively after it is ready for patenting; he must content himself with either secrecy, or legal monopoly." *Pfaff*, 525 U.S. at 68 (quoting *Metallizing Eng'g Co. v. Kenyon Bearing & Auto Parts Co.*, 153 F.2d 516, 520 (2d Cir. 1946)).

In *Pfaff*, the Supreme Court outlined a two-part test for determining whether an invention is "on sale" within the meaning of § 102(b). The patented invention must have been (1) "the subject of a commercial offer for sale" and (2) "ready for patenting." *Id.* at 67. There is no dispute here that the method, system, and computer-readable medium used by Quest during the Norco Sale were ready for patenting at the time of the Norco Sale. The question is whether

the invention was the subject of a commercial offer for sale before the critical date. This inquiry requires there have been a "commercial offer," and "the invention that [wa]s the subject matter of the offer for sale must satisfy each claim limitation of the patent, though it may do so inherently." *Scaltech, Inc. v. Retec/Tetra, LLC*, 269 F.3d 1321, 1328–29 (Fed. Cir. 2001). Further, "a sale or offer of sale need not make an invention available to the public," and "'secret sales' can invalidate a patent." *Helsinn Healthcare S.A. v. Teva Pharm. USA, Inc.*, 139 S. Ct. 628, 633 (2019).

The parties agree on appeal that the Norco Sale, which includes the Norco Strip Charts, was "a commercial offer for sale" under § 102(b).[5] The fact that Quest did not sell its furnace inspection hardware or software (i.e., its method, computer-readable medium, or system) does not take Quest's commercial activities outside the on-sale bar rule. Rather, Quest used its method, computer-readable medium, and system commercially to perform furnace inspection services and produce the Norco Reports for its customer.

Sale of a product (here, sale of the Norco Reports) produced by performing a claimed process implicates the on-sale bar. *Medicines*, 827 F.3d at 1376; *D.L. Auld Co. v. Chroma Graphics Corp.*, 714 F.2d 1144, 1147–48 (Fed. Cir. 1983); *cf. Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 629 (2008) ("[T]his Court has repeatedly held that

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[5] At summary judgment, Quest argued that the Norco Sale was not "a commercial offer for sale" under § 102(b) because it was an "experimental use" of its furnace inspection method, system, and computer-readable medium. *See Pfaff*, 525 U.S. at 64–65, 67. The district court concluded that the Norco Sale was not an experimental use, and Quest does not challenge the district court's determination on appeal.

method patents were exhausted by the sale of an item that embodied the method."). Performance of a claimed method for compensation, or a commercial offer to perform the method, can also trigger the on-sale bar, even where no product is sold or offered for sale. *Scaltech*, 269 F.3d at 1328; *Plumtree Software, Inc. v. Datamize, LLC*, 473 F.3d 1152, 1162–63 (Fed. Cir. 2006). As we held in *Scaltech*, "[t]he on sale bar rule applies to the sale of an 'invention,' and in this case, the invention was a process." 269 F.3d at 1328.

The same approach necessarily applies where a service (here, furnace tube inspection) is performed for compensation using a claimed computer-readable medium or system that generates a "product" (here, the Norco Reports).[6] The method, system, and software used during the Norco Sale to perform furnace inspection services for compensation for a customer were thus "on sale." *See Medicines*, 827 F.3d at 1376–77. The parties do not seriously dispute these propositions.[7] The question is whether the Norco Sale satisfied

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[6] This is different from the situation in which an inventor outsources and purchases manufacturing services from a contract manufacturer to produce the claimed product before the critical date, which we have held does not trigger the on-sale bar. *Medicines*, 827 F.3d at 1381.

[7] The parties agree that it makes no difference here whether the use of Quest's furnace tube inspection method and system during the Norco Sale is characterized as "on sale" or a "public use" under § 102(b). "Many decisions consider Section 102(b) without carefully differentiating public use and on sale. . . ." 2A Donald S. Chisum, Chisum on Patents § 6.02[6] (2017). Our court has also stated that the standard for what is considered a "public use" is "whether the purported use: (1) was accessible to the public; or (2) was commercially exploited," and that "[c]ommercial

each limitation of the claims, or whether there is a factual dispute that precludes summary judgment.

I. THE DISPLAY LIMITATION

Quest first argues that the Norco Strip Charts do not meet the Display Limitation. This turns on whether the district court properly construed the scope of the claims. We review a district court's claim construction de novo where, as here, the district court considered only intrinsic evidence. *Poly-Am., L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1135–36 (Fed. Cir. 2016) (citing *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 840–42 (2015)).

The parties agree that the Norco Strip Charts fit within Example 1 of the specification. Example 1 (depicted in Figure 3 below) teaches that two-dimensional color-coded strip charts that "correlate the [furnace inspection] readings to the appropriate tube segments of the furnace" can be generated and "used to visually detect problem areas within the furnace." '874 patent, col. 10, ll. 66–67; *id.* col. 11, ll. 37–38.

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exploitation [of the claimed invention] is a clear indication of public use." *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 424 F.3d 1374, 1380 (Fed. Cir. 2005) (emphasis added). Therefore, in the circumstances of this case, whether Quest's activities are considered a "public use" or "on sale" does not affect the result.

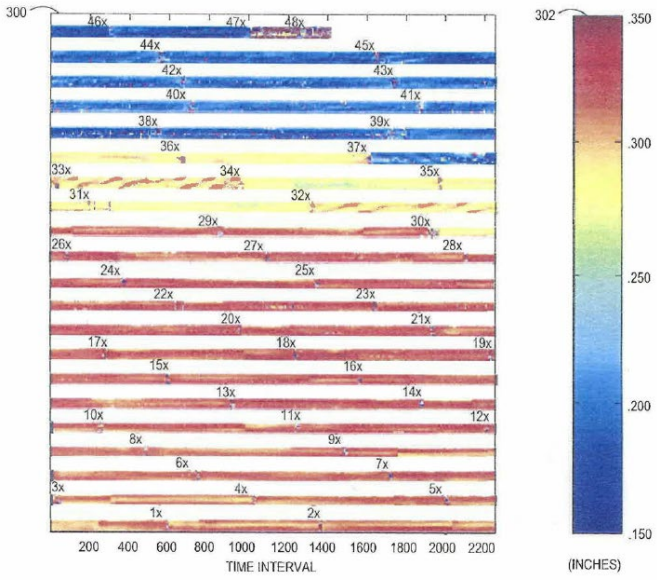

FIG. 3

The inspection data is plotted across a plurality of horizontal strips as a function of time "from left-to-right and bottom-to top." *Id.* col. 9, l. 66–col. 10, l. 4. In other words, the "the lower left-hand corner of the chart corresponds to the time when the inspection tool leaves the launcher . . . and the upper right-hand corner of the chart corresponds to the time when the inspection tool reaches the receiver." *Id.* col. 10, ll. 4–8. Bends in the furnace are indicated with an "x."

In addition to Example 1, the specification discloses other ways of displaying the inspection data. Examples 2 and 3 of the specification teach that the inspection data could also be displayed as a stacked set of bars wherein "[e]ach vertical bar displays [inspection data] from a single tube segment" of the furnace," thereby "position[ing] [the tube segments] in their proper orientation (but with the connecting bends removed)." *Id.* col. 11, ll. 60–63; *id.* col. 12, ll. 29–32. Example 4 describes displaying the data in "a three-dimensional" format in which the structure of "the tube segments . . . matches the actual physical geometry of

the furnace." *Id.* col.14, ll. 65–66. Examples 2, 3, and 4 display the data as a function of distance, rather than time.

Since the parties agree that the Norco Strip Charts fit within Example 1, the issue is whether Example 1 (like Examples 2, 3, and 4) is within the scope of the claims as allowed. There is no dispute that Example 1 was within the scope of the claims as originally drafted. The specification states that Example 1 is "provided to further describe the furnace tube inspection system of the present invention." *Id.* col. 9, ll. 41–42 (emphasis added). The issue is whether the scope of the claims was narrowed during prosecution. We conclude that the asserted claims were not narrowed to exclude Example 1 because there was neither "clear and unmistakable disclaimer" of the claim scope, *see Thorner v. Sony Comput. Entm't Am. LLC*, 669 F.3d 1362, 1366–67 (Fed. Cir. 2012), nor any other indication that the claims should be read to exclude Example 1, *see Trs. of Columbia Univ. v. Symantec Corp.*, 811 F.3d 1359, 1363–64, 1367–68 (Fed. Cir. 2016).

Here, the examiner rejected the claims multiple times over U.S. Patent No. 6,359,434 to Winslow ("Winslow"). The applicant eventually amended the claims to add the Display Limitation to overcome the examiner's rejections.

Winslow disclosed a method of analyzing and displaying data obtained from water pipes to approximate the location of defects in the water pipes in relation to the pipe joints. Winslow taught displaying located defects on a "strip chart" as a function of distance in relation to the water pipe joints. An example of a "strip chart" taught by Winslow is shown below.

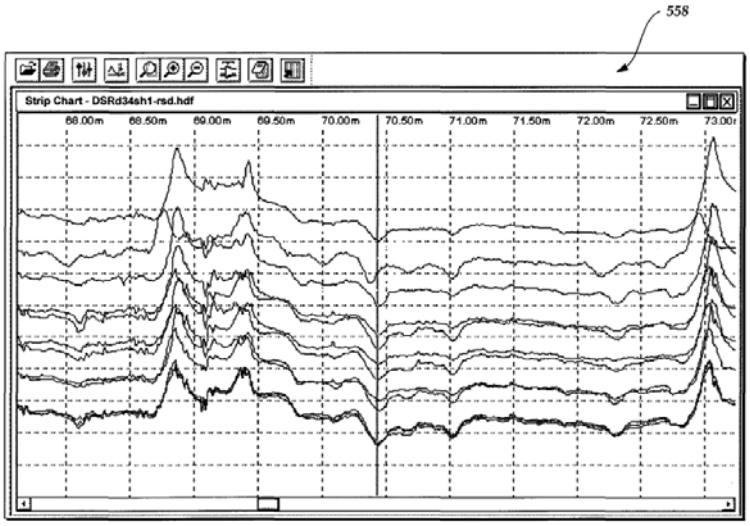

Fig.19.

The applicant distinguished the amended claims from Winslow, arguing that Winslow does not generate a display of furnace tube inspection data arranged to represent the physical geometry of a furnace. Specifically, the applicant argued that the "physical geometry of the water pipeline [in Winslow] is not known." J.A. 14950. Rather, the applicant argued that "[e]ach of the located defects is displayed in an approximate location with reference to the detected pipe joints, with no reference whatsoever to the actual physical geometry of the water pipeline." J.A. 14949 (second emphasis in original). This was in contrast to the amended claims, which the applicant argued required that "the inspection data collected from the furnace is displayed such that the data is arranged to represent the physical geometry of the furnace[,] [t]hus . . . allow[ing] a user to visually detect and immediately ascertain any problem areas within the furnace." J.A. 14950 (emphasis in original).

Although Winslow is different from Example 1 of the specification, Quest argues that the claims were broadly amended to exclude time-based strip charts (i.e., those that

display the inspection data as a function of time, such as Example 1's strip charts or the Norco Strip Charts). The theory is that time-based strip charts do not arrange the data to represent the physical geometry of the furnace. But the applicant made no such statement during prosecution. Nor did the applicant in any way suggest that Example 1 was now excluded from the scope of the claims. And Winslow was not distinguished as displaying the inspection data as a function of time. In fact, Winslow displays the water pipe data as a function of distance.

Also, the added claim language did not exclude Example 1. Quest argues that the claims were narrowed to "require[] displaying the actual physical geometry of the stacked furnace tubes (similar to Examples 2, 3, and 4) . . . to represent not just the 'physical geometry' of the furnace generally, but the 'physical geometry' of those stacked tube segments." Appellant's Br. 19–20. But the asserted claims do not use that language. The Display Limitation requires, in pertinent part, "generating a display of at least a portion of said partitioned inspection data arranged to represent said physical geometry of said tube segments." The specification uses almost identical language to describe Example 1. For example, the specification states that, in Example 1, a "display of [partitioned inspection data] collected from a furnace" is generated "to thereby correlate the various readings to the appropriate tube segments of the furnace." '874 patent, col. 9, ll. 54–61.

Since Example 1 continues to be within the scope of the claims, the Norco Strip Charts meet the Display Limitation.[8] We affirm the judgment as to claims 12, 24, and 33.

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[8] On February 22, 2019, we ordered the parties to submit supplemental briefs addressing whether any claim

II. CLAIMS 30 AND 40

As for claims 30 and 40, the additional question is whether the Norco Sale satisfied the additional limitations concerning generating "composite data markers" and analyzing "sensor data."[9] Claim 30 requires generating a plurality of "composite data markers." Claim 40 does not require generating any "composite data markers," but requires analyzing "sensor data," which is not required by claim 30. The '874 patent makes clear there is a difference between "inspection data" and "sensor data."

The district court determined that both of these additional features of claims 30 and 40 would have been satisfied by a "composite bend indicator" function that indicated bends in the inspected furnace and generated "composite data markers" based on "sensor data." Thus, whether the Norco Sale renders claims 30 and 40 invalid depends on whether the software used during the Norco Sale had a "composite bend indicator" function. The question on appeal is whether there is a material dispute of fact regarding the presence of this function in the software Quest used for the Norco Sale.

In this respect, the district court relied on the deposition testimony of De Lorenzo. Although the witness did not use the "composite bend indicator" language, the district court interpreted his deposition testimony as confirming that software with the composite bend indicator function was available and used during the Norco Sale to generate

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limitation at issue should not be given patentable weight under the printed matter doctrine. Our conclusion that the Norco Strip Charts meet the Display Limitation makes it unnecessary for us to address the printed matter doctrine.

[9] Of course, the Norco Sale satisfied the Display Limitation of claims 30 and 40 just as it satisfied the Display Limitation of claims 12, 24, and 33.

composite data markers in the Norco Strip Charts based on sensor data. For example, De Lorenzo was shown an excerpted portion of Quest's source code at his deposition and testified that, "as of roughly August 28th, 2002" (i.e., before the Norco Sale), "[Quest's] software allowed [Quest] to utilize and give to [its] customers . . . displays that had composite data markers in them" and that Quest used this "automatic composite data marker function" for its customers. J.A. 39–40. De Lorenzo also testified that axial encoder data (i.e., sensor data) was collected and actually used to establish the location of the inspection data in relation to the furnace bends during the Norco Sale.

Quest argues that there was a genuine issue of material fact that precluded summary judgment because there was also contrary evidence in the form of declarations by De Lorenzo and Bondurant contradicting the earlier deposition testimony of De Lorenzo and explaining why De Lorenzo had made an error. The district court rejected Quest's arguments, concluding that De Lorenzo and Bondurant's declarations were sham affidavits because they contradicted De Lorenzo's earlier deposition testimony.

The Third Circuit "review[s] a district court's decision to exclude materials under the sham affidavit doctrine for abuse of discretion." *Daubert v. NRA Grp., LLC*, 861 F.3d 382, 389 (3d Cir. 2017). Under the Third Circuit's sham affidavit doctrine, "a party may not create a material issue of fact to defeat summary judgment by filing an affidavit disputing his or her own sworn testimony without demonstrating a plausible explanation for the conflict." *Baer v. Chase*, 392 F.3d 609, 624 (3d Cir. 2004). The Third Circuit has explained its approach in applying the sham affidavit doctrine as a "flexible" one, "giving due regard to the 'surrounding circumstances'":

> If, for example, the witness shows she was confused at the earlier deposition or for some other reason

> misspoke, the subsequent correcting or clarifying affidavit may be sufficient to create a material dispute of fact. Same result if there's independent evidence in the record to bolster an otherwise questionable affidavit. The court may, on the other hand, disregard an affidavit when the affiant was carefully questioned on the issue, had access to the relevant information at that time, and provided no satisfactory explanation for the later contradiction. It may similarly disregard an affidavit entirely unsupported by the record and directly contrary to other relevant testimony, or if it's clear the affidavit was offered solely to defeat summary judgment.

Daubert, 861 F.3d at 391–92 (citations, alterations, and internal quotation marks omitted); *see Jiminez v. All Am. Rathskeller, Inc.*, 503 F.3d 247, 254 (3d Cir. 2007) ("[W]hen there is independent evidence in the record to bolster an otherwise questionable affidavit, courts generally have refused to disregard the affidavit."); *see also Gemmy Indus. Corp. v. Chrisha Creations Ltd.*, 452 F.3d 1353, 1359 (Fed. Cir. 2006) ("[A]lthough a party cannot simply contradict an earlier sworn statement" to overcome summary judgment, the court should not disregard the later testimony where there is "credible evidence supporting the contradiction.").

For example, in *Baer*, the district court disregarded an affidavit by Baer at summary judgment because it contradicted his earlier deposition testimony. 392 F.3d at 624–25. The Third Circuit reversed and remanded because "Baer[] [was able] to point to evidence in the record that corroborate[d] his later affidavit[, which] alleviate[d] the concern that he merely filed an erroneous certification out of desperation to avoid summary judgment." *Id.* at 626.

We conclude that the declarations of De Lorenzo and Bondurant cannot be dismissed as sham affidavits. First, Bondurant's declaration did not contradict any earlier testimony that he gave. The general rule is that the sham

affidavit doctrine provides for disregarding "an offsetting affidavit that is submitted in opposition to a motion for summary judgment when the affidavit contradicts the affiant's prior deposition testimony," not another witness's prior deposition testimony.[10] *Id.* at 624 (emphasis added) (internal quotation marks omitted); *see Nelson v. City of Davis*, 571 F.3d 924, 926 (9th Cir. 2009) ("[T]he 'sham affidavit' rule [does not] preclude[] the introduction of testimony from other witnesses that is arguably inconsistent with a plaintiff's deposition testimony."); *see also Cleveland v. Policy Mgmt. Sys. Corp.*, 526 U.S. 795, 806 (1998) (describing the sham affidavit doctrine as preventing a party from "creat[ing] a genuine issue of fact sufficient to survive summary judgment simply by contradicting his or her own previous sworn statement (by, say, filing a later affidavit that flatly contradicts that party's earlier sworn deposition) without explaining the contradiction or attempting to resolve the disparity"). The district court erred for this reason in disregarding the Bondurant declaration. Additionally, the district court erred in disregarding Bondurant's declaration for the same reasons it erred in disregarding De Lorenzo's declaration, as we now discuss.

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[10] In one case, the Third Circuit affirmed the district court's decision to disregard an affidavit that contradicted deposition testimony of a different witness. *See Daubert*, 861 F.3d at 391–92 (affirming the district court's decision to disregard the affidavit of a witness that contradicted testimony of the NRA's Rule 30(b)(6) witness because the 30(b)(6) deponent said she could have talked to the witness, the NRA did not point to any independent evidence corroborating the affidavit, nor did it explain why it believed its Rule 30(b)(6) deponent was mistaken, confused, or not in position of all the facts). We see no such circumstances here.

Second, De Lorenzo did not simply contradict his earlier testimony. He submitted a detailed declaration in which he explained why his deposition testimony was incorrect. In the declaration, he stated that the source code shows that the composite bend indicator function was still under development as of July 8, 2004, and was not available for use until after the Norco Sale because the source code shows that the most recent comment line for the composite bend indicator function is dated July 8, 2004 (i.e., after the Norco Sale). He further explained that he was only given a portion of the source code during his deposition and was not given the page with the July 8, 2004, date. He stated that had he seen the July 8, 2004, comment during his deposition, he would have known that the source code was not commercially available on August 28, 2002.

De Lorenzo thus offered a plausible explanation for why he misspoke at his deposition, and Cokebusters does not dispute that De Lorenzo was not given access to the full source code during his deposition. Nor does Cokebusters dispute that the source code contains the July 8, 2004, modification date.

In his declaration, De Lorenzo further stated that the absence of any "x"s in the Norco Strip Charts conclusively proves that the composite bend indicator function was not available or used for the Norco Sale. As he explained, the source code with the July 8, 2004, date shows that, when a bend was detected, the code would instruct the software to display an "x" at the detected bend. The Norco Strip Charts have no such "x"s. De Lorenzo testified at his deposition that he manually marked the bends in the Norco Strip Charts himself with black ticks.

De Lorenzo also stated in his declaration that, even if the source code with the July 8, 2004, date was available at the time of the Norco Sale, the composite bend indicator function was "commented out." It is difficult to tell from

the record what it means for a function to be "commented out" of the source code, but the parties at least agree that a function "commented out" could not be used by the program. De Lorenzo explained in his declaration that the composite bend indicator function is preceded by a particular symbol in the source code, and that the particular symbol means that the function was commented out and thus could not have been used to generate composite data markers.

Cokebusters does not dispute that the source code shows that the composite bend indicator function was commented out of the program. Cokebusters only argues that the function was not commented out until after the Norco Sale based, in part, on De Lorenzo's deposition testimony where he suggested that the function was available at the time of the Norco Sale. However, in another part of the deposition, De Lorenzo explained that the function was commented out, and his declaration now explains why that is accurate.[11]

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[11] The district court stated that whether a claimed function was "commented out" of the source code, and thus not used, is irrelevant under *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197 (Fed. Cir. 2010). In *Finjan*, we held that accused software products sold to customers infringed the system and computer-readable medium claims even though the relevant program source code was locked or inactive when sold because customers could unlock or activate the claimed functions by purchasing keys. 626 F.3d at 1204–05. However, even assuming that the question of a "sale" or "offer for sale" is the same both for purposes of infringement under 35 U.S.C. § 271(a) and the on-sale bar, *Finjan* is inapplicable to the Norco Sale. Quest did not sell the system or computer-readable medium itself,

Third, there is also present here "independent evidence in the record" that bolsters De Lorenzo's declaration. *Jiminez*, 503 F.3d at 254. De Lorenzo's declaration is supported by Bondurant's declaration, testimony from Quest's own experts, Drs. Robert Caligiuri and Shukri J. Souri, and the source code itself, which support that the composite bend indicator function would have produced black "x"s near furnace bend locations if the function had been used. Drs. Caligiuri and Souri also testified that, even if the composite data marker function was used during the Norco Sale to generate composite data markers, the function would not have used "sensor data" to generate data markers, as required by claim 40, because the source code shows sensor data would have been discarded, and not analyzed, after being collected. Rather, they testified that the composite bend indicator function would have only used inspection data to create data markers.

The detailed explanation in De Lorenzo's declaration and corroborating evidence took the declaration out of the sham affidavit doctrine. At trial, the jury may credit the deposition testimony over the declaration. But that is a question for the jury, not for the court on summary judgment.

In summary, it was error for the district court to disregard the declarations of De Lorenzo and Bondurant, even applying the deferential standard of review, particularly since Cokebusters has the burden to show by clear and

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but rather used its system and computer-readable medium to perform commercial services and generate the Norco Reports. Therefore, if the composite bend indicator function was commented out at the time of the Norco Sale, the commercial activity did not satisfy each claim limitation of claims 30 and 40.

convincing evidence that the Norco Sale satisfied all of the limitations of claims 30 and 40.[12] The district court could not disregard the De Lorenzo and Bondurant declarations, and there is a genuine issue of material fact as to whether the Norco Sale satisfied the limitations of claims 30 and 40. Accordingly, we reverse the judgment as to claims 30 and 40 and remand for a trial.

CONCLUSION

We affirm the district court's judgment that claims 12, 24, and 33 of the '874 patent are invalid under the on-sale bar. We reverse the judgment as to claims 30 and 40 and remand for further proceedings consistent with this opinion.

AFFIRMED-IN-PART, REVERSED IN-PART, AND REMANDED

COSTS

No costs.

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[12] The district court seems to have also disregarded the declarations because they contradicted an invention disclosure drafted by Bondurant and dated August 30, 2002. That is not consistent with the sham affidavit doctrine, which precludes a party from creating a genuine dispute of material fact "by filing an affidavit disputing his or her own sworn testimony without demonstrating a plausible explanation for the conflict." *Baer*, 392 F.3d at 624 (emphasis added). The draft inventor disclosure is not sworn testimony.