

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

KEY ENERGY SERVICES, INC.	§	
	§	
vs.	§	
	§	CASE NO. 2:08-CV-346-DF-CE
C.C. FORBES, LLC AND PETRON	§	
INDUSTRIES INC.	§	

MEMORANDUM OPINION AND ORDER

After considering the submissions and the arguments of counsel, the court issues the following order concerning the claim construction issues:

I. Introduction

In this case, the plaintiff Key Energy Services, Inc. (“Key”) contends that the defendants C.C. Forbes, LLC (“Forbes”) and Petron Industries Inc. (“Petron”) infringe various claims of United States Patent Nos. 6,079,490 (“the ‘490 patent”) and 7,006,920 (“the ‘920 patent”). This memorandum addresses the parties’ various claim construction disputes. The memorandum will first briefly address the technology at issue in the case and then turn to the merits of the claim construction issues.

II. Background of the Technology

The ‘490 patent is titled “Remotely Accessible Mobile Repair Unit for Wells.” The invention is described in the patent’s Abstract:

A self-contained mobile repair unit for repairing wells includes the hydraulic and pneumatic tooling required to do a variety of jobs including the installation and removal of an inner pipe string, sucker rods and a pump. The repair unit, hydraulic tooling and pneumatic tooling share a common engine and a common process monitor. Access to data gathered by the monitor is restricted at the job site itself. Instead, the data is transmitted to a remote home base for the purpose of monitoring operations [from] a central location.

Claim 1 is a representative claim that illustrates the scope of the invention:

A retractable and self-contained mobile repair unit for repairing wells at a plurality of various job sites, said mobile repair unit having a universal capability of servicing an inner pipe string, a sucker rod, and a pump, said mobile repair unit comprising:

- a truck frame supported on a plurality of wheels;
- an engine coupled to said truck frame and adapted to relocate said truck frame to said various job sites;
- a hydraulic pump coupled to said engine;
- an air compressor coupled to said engine;
- a first transmission coupled between said engine and said plurality of wheels;
- a second transmission coupled to said engine;
- a variable speed hoist coupled to said second transmission;
- an extendible derrick pivotally coupled to said truck frame, said derrick being selectively repositionable to a lowered position and a working position, said derrick being retracted in said lowered position and extended in said working position, said derrick being pointed upward but having a longitudinal centerline that is angularly offset from vertical in said working position;
- a block suspended by said hoist at a position that is angularly offset to said centerline of said derrick when said derrick is in said working position, said block being selectively coupled to said inner pipe string, said sucker rod, and said pump, said block in conjunction with said hoist being adapted to raise and lower said inner pipe string, said sucker rod, and said pump in a substantially vertical direction;
- a first hydraulic cylinder coupled to said derrick and said hydraulic pump, said first hydraulic cylinder adapted to extend and retract said derrick;
- a second hydraulic cylinder coupled to said derrick and said hydraulic pump, said second hydraulic cylinder adapted to pivot said derrick;
- a hydraulic tong coupleable to said hydraulic pump and adapted to apply a torque to at least one of said inner pipe string and said sucker rod, thereby facilitating installation and removal of at least one of said inner pipe string and said sucker rod;
- a pneumatic slip coupleable to said air compressor and adapted to selectively grip and release said inner pipe string to facilitate installation of said inner pipe string;
- a first transducer providing a first signal that varies as a function of weight applied to said block;
- a clock providing a time of day reference;
- a memory electrically coupleable to said first transducer, said memory storing a first plurality of digital values representative of said first signal, said first plurality of digital values being associated with said time of day reference; and
- a modem electrically coupleable to said memory, said modem adapted to link said memory to a remote home base to establish a communication link between said remote home base and said plurality of various job sites at which said retractable and self-contained mobile repair unit is working.

The '920 patent is titled "Activity Data Capture System for a Well Service Vehicle." The invention is described in the patent's Abstract:

The present invention is directed to incrementing a well service rig in such a manner that activity-based and/or time-based data for the well site is recorded. The acquired data can be transmitted via wired, wireless, satellite or physical to a data center preferably controlled by the work-over rig owner, but alternately controlled by the well owner or another. The data can thereafter be used to provide the customer a detailed invoice or a searchable, secure web-based database. With such information, the customer can schedule other services at the well site. Further, the customer will have access to detailed data on the actual service performed. The present invention fosters a synergistic relationship among the customer and the service companies that promotes a safe environment by monitoring crew work activities and equipment speeds; improving productivity; reducing operation expenses through improved job processes; and better data management and reduced operational failures.

Claim 1 is a representative claim that illustrates the scope of the invention:

A method of servicing a well at a wellsite, comprising:
measuring a variable associated with servicing the well, electronically recording the measured variable on a first computer;
inputting non-numerical activity data associated with servicing the well into a second computer;
transferring the electronically recorded measured variable and activity data from the wellsite to a central location.

III. General Principles Governing Claim Construction

"A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999) (quoting *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989)). Claim construction is an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 391 (1996).

To ascertain the meaning of claims, the court looks to three primary sources: the claims, the specification, and the prosecution history. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979

(Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996) (quoting *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1561 (Fed. Cir. 1991)). Under the patent law, the specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. 35 U.S.C. § 112; *id.* at 978. A patent's claims "must be read in view of the specification, of which they are a part." *Markman*, 52 F.3d at 979. "For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims." *Id.* "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee's claims. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). And, although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Scis., Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994). This court's claim construction decision must be informed by the Federal Circuit's decision in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the *claims* of a patent define the invention to which the patentee is entitled the right to exclude." *Id.* at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)) (emphasis added). To that end, the

words used in a claim “are generally given their ordinary and customary meaning.” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Id.* at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention. *Id.* The patent is addressed to and intended to be read by others skilled in the particular art. *Id.*

The primacy of claim terms notwithstanding, *Phillips* made clear that “the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Phillips*, 415 F.3d at 1313. Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of “a fully integrated written instrument.” *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314-17. The Supreme Court stated long ago that “in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims.” *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.

Phillips, 415 F.3d at 1316. Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. The prosecution history helps to demonstrate how the inventor and the PTO understood the patent. *Id.* at 1317. Because the file history, however, “represents an ongoing negotiation between the PTO and the applicant,” it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence. *Id.* That evidence is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. *Id.* The *en banc* court condemned the suggestion made by *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Phillips*, 415 F.3d at 1319-24. The approach suggested by *Texas Digital*—the assignment of a limited role to the specification—was rejected as inconsistent with decisions holding the specification to be the best guide to the meaning of a disputed term. *Id.* at 1320-21 (quoting *Vitronics*, 90 F.3d at 1582). According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of “focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent.” *Id.* at 1321. *Phillips* emphasized that “[t]he patent system is based on the proposition that the claims cover only the invented subject matter.” *Id.* What is described in the claims flows from the statutory requirement imposed on the patentee to describe

and particularly claim what he or she has invented. *Id.* The definitions found in dictionaries, however, often flow from the editors' objective of assembling all of the possible definitions for a word. *Id.* at 1321-22.

Phillips does not preclude all uses of dictionaries in claim construction proceedings. *Phillips*, 415 F.3d at 1322. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. *Id.* at 1317-19. In doing so, the court emphasized that claim construction issues are not resolved by any "magic formula." *Id.* at 1324. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323-25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant. *Id.* at 1324.

Means-plus-function claim terms are governed by § 112, ¶ 6, which states that a claim term "may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112, ¶ 6. After the function of the means-plus-function limitation has been identified, the "court looks to the written description to identify the structure corresponding to that function." *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999). As the Federal Circuit stated in *In re Donaldson Co.*, 16 F.3d 1189 (Fed. Cir. 1994) (en banc):

[I]f one employs means-plus-function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112.

Id. at 1195. The court must determine whether “one skilled in the art” would find enough structure disclosed in the specification to find the claim sufficiently definite. *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1378 (Fed. Cir. 1999). For computer-implemented means-plus-function limitations, the corresponding structure in the specification is the algorithm that performs the claimed function. *WMS Gaming, Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). The specification must disclose enough detail about the algorithm, such as a formula, prose, or a flow chart, to provide the structure required by § 112, ¶ 6. *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1340 (Fed. Cir. 2008). The court now turns to a discussion of the relevant claim terms.

IV. Agreed Terms

- “a retractable and self-contained mobile repair unit” means “a vehicle designed to provide work-over and repair services for already-existing oil or gas wells”

V. Disputed Terms

A. “second transmission”

Claim 1 of the ‘490 patent contains the term “second transmission”: “said mobile repair unit comprising: . . . a *second transmission* coupled to said engine; a variable speed hoist coupled to said *second transmission*.” The claim describes the first transmission being coupled to the wheels and the second transmission being coupled to the hoist. Key contends that no construction of this term is necessary. The defendants’ proposed construction of “second transmission” is “a second compact, enclosed unit of gears or the like for the purpose of transference of force between machines or mechanisms, often with changes of torque and speed, that is separate and independent from a first such assembly.”

The defendants argue that the second transmission must be “separate and independent” from

the first transmission. Forbes and Petron point to portions of the specification and the prosecution history that describe multiple transmissions, e.g., “[a]pplicant’s claimed engine and *multiple transmissions* do not appear to be disclosed” by the prior art references, (Dkt. No. 91, Ex. 4, at 12), and Figure 1, which depicts the first transmission 32 and the second transmission 34 as two separate and independent components. Key responds that nothing in the patent requires the transmissions to be “separate and independent.” Key points out that the applicant did not argue to the PTO that the transmissions had to be separate and independent; he distinguished his invention from the prior art based on multiple transmissions. The plaintiff further contends that the figures and specification passages cited by Forbes and Petron describe preferred embodiments that should not restrict the breadth of the claims.

The Federal Circuit has addressed the issue of whether recited claim elements must be separate and distinct. In *Linear Technology Corp. v. International Trade Commission*, the court construed the terms “second circuit” and “third circuit.” 566 F.3d 1049, 1054-55 (Fed. Cir. 2009). *Linear Technologies* rejected the argument that the two circuits must be “entirely separate and distinct.” *Id.* at 1055. “Rather, the ‘second’ and ‘third’ circuits must only perform their stated functions” and “can contain overlapping components.” *Id.* at 1055-56. Although the ‘490 patent’s preferred embodiment discloses separate and independent transmissions, nothing in the patent disclaims two transmissions that share overlapping components. And, even though the specification in *Linear Technology* disclosed the circuits as having overlapping components, the rule announced by the Federal Circuit was that the patentee was entitled to the full scope of the claim term, absent a clear disavowal or a contrary definition. *Id.* at 1055 (citing *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1252, 1358 (Fed. Cir. 2004)). Based on *Linear Technology* and a reading of the ‘490

patent as a whole, the court will not impose a “separate and independent” limitation. Therefore, “second transmission” is construed to mean “a second compact, enclosed unit of gears or the like for the purpose of transference of force between machines or mechanisms, often with changes of torque and speed.”

B. “remote home base”

Claim 1 of the ‘490 patent contains the term “remote home base”: “said modem adapted to link said memory to a *remote home base* to establish a communication link between said *remote home base* and said plurality of various job sites at which said retractable and self-contained mobile repair unit is working.” The term appears several times in the specification, e.g., “[a] monitor senses the load on the derrick and conveys that information to a *remote home base* where the time of critical events is identified,” (‘490 patent, 2:13-15), and “[m]onitor 48 converts signal 94 to a digital value, stores it in a memory 96, associates it with a real time stamp, and eventually communicates the data to a *remote home base* 100 by way of a modem 98,” (‘490 patent, 3:52-55) (emphasis added). According to Key, no construction of “remote home base” is necessary. Alternatively, Key proposes “a location remote from the work site where the repair unit is operating.” The defendants’ proposed construction is “the location where the operator of the mobile repair unit receives data related to the repair unit, and such location is removed from the work site at which the repair unit is operating.”

Forbes and Petron contend that the following sentence from the specification supports their proposed construction: “An operator at a home base 100 remote from the work site at which repair unit 20 is operating accesses the data stored in circuit 124 by way of a PC-based modem 98 and a cellular phone 136.” (‘490 patent, 4:28-31). But Key argues that the operator requirement

unnecessarily imports a limitation from the preferred embodiment. Furthermore, Key contends that the “operator at a home base” may be the well operator, not just the service rig operator.

The court is persuaded by the plaintiff’s argument. Nothing in the patent requires “remote home base” to be limited to the preferred embodiment. Thus the court construes this term to mean “a location remote from the work site where the repair unit is operating.”

C. “link said memory to a remote home base”

Claim 1 of the ‘490 patent contains the term “link said memory to a remote home base”: “a modem electrically coupleable to said memory, said modem adapted to *link said memory to a remote home base* to establish a communication link.” The exact term “link said memory to a remote home base” is not found in the specification. The specification does describe the modem transferring data from memory, however: “Monitor 48 converts signal 94 to a digital value, stores it in a memory 96, associates it with a real time stamp, and eventually communicates the data to a remote home base 100 by way of a modem 98.” (‘490 patent, 3:52-55). The plaintiff contends that no construction of this term is necessary. Forbes and Petron assert the following construction: “to connect the unit of a computer that preserves data for retrieval with the location where the operator of the mobile repair unit receives data related to the repair unit, and such location is removed from the work site at which the repair unit is operating.”

The parties’ first dispute centers around the meaning of “said memory.” “Memory” is described in the preceding limitation of claim 1: “a *memory* electrically coupleable to said first transducer, said *memory* storing a first plurality of digital values.” Key argues that “memory” does not require definition, or alternatively, it should be defined as “a device for storing data.” The defendants contend that the “memory” must be computer memory. Key responds, however, that the

patent does not use the word “computer.” Furthermore, the specification discloses a “Pocket Logger” that has a memory, (‘490 patent, 4:17-20). Key urges that the limitation “computer” may exclude this preferred embodiment. Based upon the use of “memory” in the preceding limitation, quoted above, the court will define “memory” as a “a device that stores digital data.”

Next, Forbes and Petron wish to define “link” as “connect.” The meaning of “link” is illuminated by the way it is used in the remainder of the claim limitation: “said modem adapted to link said memory to a remote home base *to establish a communication link* between said remote home base and said plurality of various job sites.” This language indicates that the “link” action refers to “establish[ing] a communications link.” Thus, thus court will define “link” as “establish a communication connection.”

The defendants also propose language regarding “remote home base.” As this term has already been construed, it does not need to be addressed again. In all, the court construes “link said memory to a remote home base” to mean “establish a communication connection between a device that stores digital data and a ‘remote home base.’”

D. “establish a communication link between said remote home base and said plurality of various job sites”

The term “establish a communication link between said remote home base and said plurality of various job sites” is found in claim 1 of the ‘490 patent: “said modem adapted to link said memory to a remote home base *to establish a communication link between said remote home base and said plurality of various job sites* at which said retractable and self-contained mobile repair unit is working.” The exact term is not found in the specification. But the specification does describe the following: “Monitor 48 converts signal 94 to a digital value, stores it in a memory 96, associates it with a real time stamp, and eventually communicates the data to a remote home base 100 by way

of a modem 98. . . . An operator at a home base 100 remote from the work site at which repair unit 20 is operating accesses the data stored in circuit 124 by way of a PC-based modem 98 and a cellular phone 136.” (‘490 patent, 3:52-55, 4:28-31). Key argues that “establish a communication link between said remote home base and said plurality of various job sites” requires no construction. On the other hand, the defendants contend that this term means “to create a tie or bond that allows the exchange of information between the location where the operator of the mobile repair unit receives data related to the repair unit, and such location is removed from the multiple diverse kinds of work sites at which the repair unit is operating.”

The defendants argue that the claim language requires a single communication link that connects the remote home base to each of the plurality of job sites. Forbes and Petron emphasize that the *plurality* of job sites necessarily requires more than one job site. The claim is not limited to a single communications link, however; when used with an open-ended transition, the indefinite article “a” means “one or more” except in rare circumstances where the patentee clearly intended to limit the term to a single item. *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342 (Fed. Cir. 2008). Nothing in the patent indicates that the inventor intended to limit the claimed system to a single communications link. Thus, there may be more than one communications link connecting the remote home base and plurality of job sites. This reading of the claim language is reinforced by the use of the word “between.” If the patentee had intended for a single communications link to connect the remote home base to each of the plurality of job sites, presumably he would have used the word “among” instead of “between.”

In further support of their proposed single communication link construction, the defendants contend that each mobile repair unit could have a modem that communicates to a single central

memory, which in turn communicates to the remote home base. This configuration would not satisfy the claim language, however. The claim requires a “self-contained mobile repair unit . . . comprising: . . . *a memory* . . . and a modem electrically coupleable to said memory.” The defendants’ depiction of three mobile repair units at three job sites sharing a single memory would not satisfy the requirements of claim 1; each mobile repair unit must have its own memory. As such, the court is persuaded that each communication link is required to connect only one job site to the remote home base. Therefore, the term “establish a communication link between said remote home base and said plurality of various job sites” is construed to mean “establish communication connections between the remote base and each of the various job sites.”

E. “mobile well service vehicle”

The term “mobile well service vehicle” is found in the preamble of the ‘920 patent’s claim 24: “A *mobile well service vehicle*, comprising” Although this exact term is not found in the specification, the specification does describe a “well service rig,” a “mobile work-over rig,” and a “mobile repair unit”: e.g., “[t]he present invention is directed to incrementing a *well service rig* in such a manner that activity-based and/or time-based data for the well site is recorded,” (‘920 patent, 2:14-16), “the *mobile work-over rig* is typically the center of work-over of service operations at the well site,” (‘920 patent, 2:65-66), and “[r]eferring to FIG. 5, a retractable, self-contained *mobile repair unit* 20 is shown.” (‘920 patent, 8:14-15) (emphasis added). Key contends that “mobile well service vehicle” means “a vehicle designed to provide work-over or other well repair services for already-existing oil or gas wells.” On the other hand, Forbes’s and Petron’s proposed construction is “the retractable and self-contained mobile repair unit for repairing wells as defined in the ‘490 Patent.”

Both parties agree that the “mobile well service vehicle” in the ‘920 patent is the same as the “retractable and self-contained mobile repair unit” claimed in the ‘490 patent. Even though the parties agreed to the construction of “retractable and self-contained mobile repair unit,” the defendants want to add “as defined in the ‘490 Patent” language because the ‘920 patent incorporates the ‘490 patent by reference. As such, Forbes and Petron contend that the construction of “mobile well service vehicle” must contain all of the limitations of the ‘490 patent’s “retractable and self-contained mobile repair unit.”

“To incorporate material by reference, the host document must identify with detailed particularity what specific material it incorporates and clearly indicate where that material is found in the various documents.” *Cook Biotech Inc. v. Acell, Inc.*, 460 F.3d 1365, 1376 (Fed. Cir. 2006) (quoting *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000)) (construing a disputed claim term). A “mere *reference* to another application, or patent, or publication is not an *incorporation* of anything therein.” *Callaway Golf Co. v. Acushnet Co.*, 576 F.3d 1331, 1346 (Fed. Cir. 2009) (quoting *In re De Seversky*, 474 F.2d 671, 674 (C.C.P.A. 1973)) (emphasis in original).

In the context of this term, the ‘490 patent is mentioned at two relevant locations in the ‘920 patent. First, near the beginning of the specification, it states, “[b]efore turning to a detailed description of the current embodiment of the present invention, applicants hereby incorporate by reference the following patents and patent applications,” and lists twenty-three references, including the ‘490 patent. (‘920 patent, 4:12-52). The defendants argue this language incorporates the entire ‘490 patent, including its claim limitations. (*See* Dkt. No. 92, at 25 (“The ‘490 Patent is first incorporated by reference generally and before any descriptions of the preferred embodiments.”)).

Although the '490 patent is incorporated by reference, it is unclear from this language that the patentee was defining the term "mobile well service vehicle" by reference to all of the features described in the '490 patent. The specification's second reference to the '490 patent reads, "[i]n one embodiment of the present invention, the activity data is gathered by the computer along with process data from the well service vehicle, such as is described in U.S. Pat. No. 6,079,490, which is hereby incorporated by reference." ('920 patent, 8:10-14). This second discussion of the '490 patent is sufficient to incorporate by reference, but the relevant portion is introduced by the words "in one embodiment of the present invention."

The court is not persuaded that importing claim limitations from the incorporated reference is proper in this case. Forbes's and Petron's reliance on *Cook Biotech* is misplaced. In *Cook Biotech*, the '508 patent was expressly incorporated into the '389 patent, the '508 patent's specification defined a term, and as such, the '389 patent incorporated the '508 patent's definition of that term. *Cook Biotech*, 460 F.3d at 1375-77. *Cook Biotech* did not, however, incorporate claim limitations from the '508 patent into the '389 patent. Furthermore, at the *Markman* hearing, counsel for the defendants asserted that the limitations of only the independent claim (claim 1) of the '490 patent should be imported into "mobile well service vehicle." Oral Argument at 1:00:43, *Key Energy Servs., Inc. v. C.C. Forbes, LLC*, 2:08-cv-346 (E.D. Tex. June 10, 2010). Forbes and Petron provide no explanation why only the limitations of the independent claim, and not any of the dependent claim limitations, would be incorporated. In all, the scope of "mobile well service vehicle" is not restricted by the limitations of the '490 patent. As such, for this term, the court adopts the agreed construction of "retractable and self-contained mobile repair unit": "a vehicle designed to provide work-over and repair services for already-existing oil or gas wells."

F. “central location”

Claim 24 of the ‘920 patent contains the term “central location”: “A mobile well service vehicle, comprising: . . . a means for transferring the electronically recorded measured variable and activity data from the wellsite to a *central location*.” The exact term “central location” is not found in the specification. But the specification does use the phrase “central office site”: e.g., “The primary objective of monitor 48 is to gather well maintenance data and save it so that it can be transferred and subsequently monitored at a site other than the location of the mobile repair unit, such as a central office site.” (‘920 patent, 9:29-32). Key contends that no construction of “central location” is necessary. Alternatively, Key proposes the following definition: “a site other than the location of the mobile repair unit.” Forbes and Petron argue that “central location” means “a site where data transmitted from the work site is available and/or accessible to at least the operator of the mobile repair unit.”

The defendants argue that the central location must be a location where data gathered from the well can be transmitted. But importing this limitation into the term is unnecessary and redundant, as the claim explicitly states that data is transferred from the wellsite to a central location. Next, Forbes and Petron contend that the central location must provide data access to the mobile repair unit operator. In support of this argument, the defendants cite the following language from the ‘920 patent’s Abstract: “The acquired data can be transmitted via wired, wireless, satellite or physical to a data center preferably controlled by the work-over rig owner, but alternately controlled by the well owner or another.” Although this language indicates that an object of the invention is to make the data available at a data center *controlled* by the rig owner, well owner, or another, it does not contain an availability or accessibility requirement. This language does suggest, however,

that the central location serves as a “data center.” The defendants also quote a passage from the specification:

If it is chosen to send the data to a centrally located office site, the well service provider could then have instant access to data and activity information pertaining to the wells service operations at the well. In some embodiments, the well service provider can make the information instantly available on the internet for the customer to view as well.

(‘920 patent, 9:62-67). But this language refers to an embodiment, and it uses non-mandatory language, i.e., “could” and “can.” Based on the specification, the court’s construction of “central location” is “a data center located remotely from the mobile repair unit.”

G. “means for electronically recording non-numerical activity data”

Claim 24 of the ‘920 patent contains the term “means for electronically recording non-numerical activity data”: “A mobile well service vehicle, comprising: . . . a *means for electronically recording non-numerical activity data* associated with servicing the well” The parties agree that this is a means-plus-function claim. Key contends that the supporting structure includes “entering the data into a computer using keyboard and preprogrammed buttons on a touchscreen. The data is recorded on the hard drive of a computer or in the memory of a microprocessor.” According to the defendants, this is a computer-implemented means-plus-function claim, and the patent discloses no corresponding structure other than a general purpose computer or microprocessor; thus, the claim is indefinite.

Forbes and Petron argue that this claim lacks corresponding structure because the specification fails to disclose an algorithm for storing the data. The court rejects this argument. Read in the context of the specification and other claims, the “means for electronically recording non-numerical activity data” term claims structure for performing the function of inputting data, not

saving or storing data. Claim 27, which depends from claim 24, includes additional limitations for another term, “means for transferring.” Claim 27 teaches that one form of transmitting is “saving the recorded measured variable and activity data on a data storage medium.” This language indicates that saving the data on a data storage medium may be performed by the transmitting step, not the recording step. If the means for recording were responsible for saving the data onto a storage medium, the further limitation in claim 27 would be redundant. Furthermore, dependent claims 30 and 31, which also depend from claim 24, teach that the means for recording is “entering the data into a computer using a keyboard” and “entering the data into a computer using pre-programmed buttons associated with a specific activity,” respectively. Both claims state that the “means for recording the non-numerical activity data . . . *is* entering the data”; these dependent claims do not recite that data entry is merely a step in recording. Thus, this means for recording term does not include storage of data, but only entry of data.

Both the claims and specification disclose data entry via a keyboard and a touchscreen: e.g., “[t]he operator can interface with the computer using a variety of means, including typing on a keyboard or using a touchscreen,” (‘920 patent, 7:50-52), “a screen with pre-programmed buttons (10) is provided to the operator,” (‘920 patent, 7:52-53), “entering the data into the keyboard using a computer,” (‘920 patent, claim 30), and “entering the data into a computer using pre-programmed buttons associated with a specific activity,” (‘920 patent, claim 31). Based on the intrinsic record, the court construes the function of this term as “entering the non-numerical activity data,” and the corresponding structure is “a keyboard and a touchscreen.”¹ As the keyboard and touchscreen are not general purpose computers or microprocessors, no disclosure of an algorithm is required.

¹ The scope of the claim includes the disclosed structure and equivalents. 35 U.S.C. § 112, ¶ 6.

H. “means for electronically recording the measured variable”

Claim 24 of the ‘920 patent contains the term “means for electronically recording the measured variable”: “A mobile well service vehicle, comprising: a transducer for measuring a variable associated with servicing a well, a *means for electronically recording the measured variable . . .*” As in the “means for electronically recording non-numerical activity data” term, the defendants contend that this is a computer-implemented means-plus-function claim, and the patent discloses no corresponding structure other than a general purpose computer or microprocessor.

The function of this term should be construed similarly to the other “means for electronically recording” term, discussed above; thus, the function performed by both terms is entry of data. Claim 29, which depends from claim 24, states, “wherein the means for electronically recording the measured variable and the means for electronically recording non-numerical activity data associated with servicing the well are the same.” The corresponding structure for “means for electronically recording the measured variable” must therefore encompass a keyboard and a touchscreen, which is the corresponding structure of “means for electronically recording non-numerical activity data.” In addition, the specification discloses that the transducers automatically input data into the data acquisition monitor: “[m]onitor 48 . . . receives . . . various parameters measured during the mobile repair unit’s operation,” (‘920 patent, 8:21-24), and “the signals provide[d] by the various transducers associate[d] with the tools are sent to data acquisition monitor 48,” (‘920 patent, 9:27-29). Thus, the data acquisition monitor is yet another corresponding structure. In all, the corresponding structure for “means for electronically recording the measured variable” is “a data acquisition monitor, keyboard, and touchscreen.”²

² The scope of the claim includes the disclosed structure and equivalents. 35 U.S.C. § 112, ¶ 6.

I. “means for transferring the electronically recorded measured variable and activity data”

Claim 24 of the ‘920 patent contains the term “means for transferring the electronically recorded measured variable and activity data”: “A mobile well service vehicle, comprising: . . . a *means for transferring the electronically recorded measured variable and activity data* from the wellsite to a central location.” Key, Forbes, and Petron all agree this is a means-plus-function term. Key contends that the supporting structure is a modem over a cellular phone, satellite hookup, wireless communication device, or a data storage medium that is physically transferred to the central location. According to the defendants, this is a computer-implemented means-plus-function claim, and the patent discloses no corresponding structure other than a general purpose computer; thus, the claim is indefinite.

Key points to language in the specification that discloses multiple structures for transferring data:

In one embodiment, the activity and process data is transferred using a *modem and cellular phone* arrangement such as is described in U.S. Pat. No. 6,079,490. In other embodiments, the data is transferred using other types of wireless communication, such as via a *satellite hookup*. The data can also be transferred using a hard disk medium, wherein the data is saved on a *floppy disk, CD, or other memory storage device and physically transferred* to the central office site.

(‘920 patent, 9:51-61) (emphasis added). Likewise, dependent claim 27 lists specific means for transferring:

wherein the means of transferring . . . data . . . is selected from the group consisting of transmitting via a *modem over a cellular phone*, transmitting via a *satellite hookup*, transmitting via a *wireless communication device*, and transmitting by saving the recorded measured variable and activity data on a *data storage medium* and physically transferring the data storage medium to the central location.

Based upon the structure provided in the specification and claim 27, the court holds that the

corresponding structure is (1) a modem in conjunction with a cellular phone, (2) a satellite hookup, (3) a wireless communication device, and (4) a data storage medium.³ Because none of these corresponding structures is a general purpose computer or microprocessor, no disclosure of an algorithm is required. *Cf. AdvanceMe, Inc. v. RapidPay, LLC*, 2006 WL 3761975, at *9-10 (E.D. Tex. Dec. 21, 2006) (holding that the corresponding structure of “receiving means” was a modem; the corresponding structure did not include a computer and software).

VI. Conclusion

The court adopts the constructions set forth in this opinion for the disputed terms of the ‘490 and ‘920 patents. The parties are ordered that they may not refer, directly or indirectly, to each other’s claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the court.

SIGNED this 7th day of July, 2010.


CHARLES EVERINGHAM IV
UNITED STATES MAGISTRATE JUDGE

³ The scope of the claim includes the disclosed structure and equivalents. 35 U.S.C. § 112, ¶ 6.