United States District Court,
C.D. California, Eastern Division.

David GROBER et al,
Plaintiffs.
v.
MAKO PRODUCTS, INC. et al,
Defendants.

No. CV-04-8604-SGL (OPx)

June 4, 2009.

Edwin P. Tarver, Robert J. Lauson, Lauson and Tarver LLP, El Segundo, CA, Joel R. Bennett, Joel R. Bennett Law Office, Los Angeles, CA, for Plaintiffs.

Janet R. Varnell, Brian W. Warwick, Varnell and Warwick, The Villages, FL, Stanley P. Lieber, Stanley P. Lieber Law Offices, Woodland Hills, CA, for Defendants.

ORDER CONSTRUING CLAIMS OF '662 PATENT **FOLLOWING MARKMAN HEARING**

STEPHEN G. LARSON**, District Judge.**

This is a patent infringement case concerning a movie camera stabilization device known as the Perfect Horizon. The Perfect Horizon is used for filming on a unstable surface like water while either on the move or stationary. David Grober invented the device and received both an Academy Award in technical achievement and also a United States patent, U.S. Patent No. 6,611,662 ("the '662 patent"), the latter being at issue in this case. Drawings of some of the preferred embodiments of the '662 patent are depicted below:

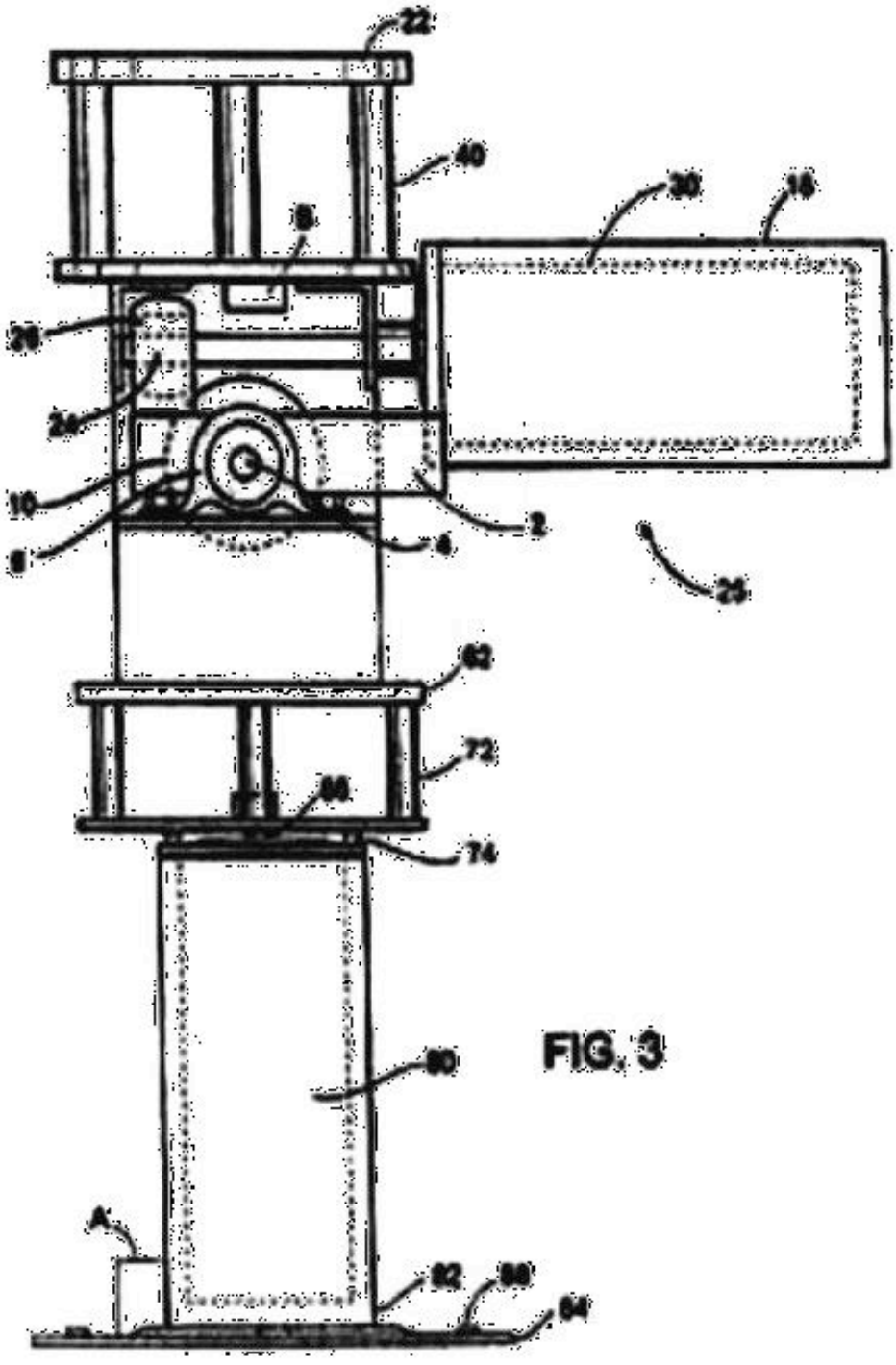

FIG. 3

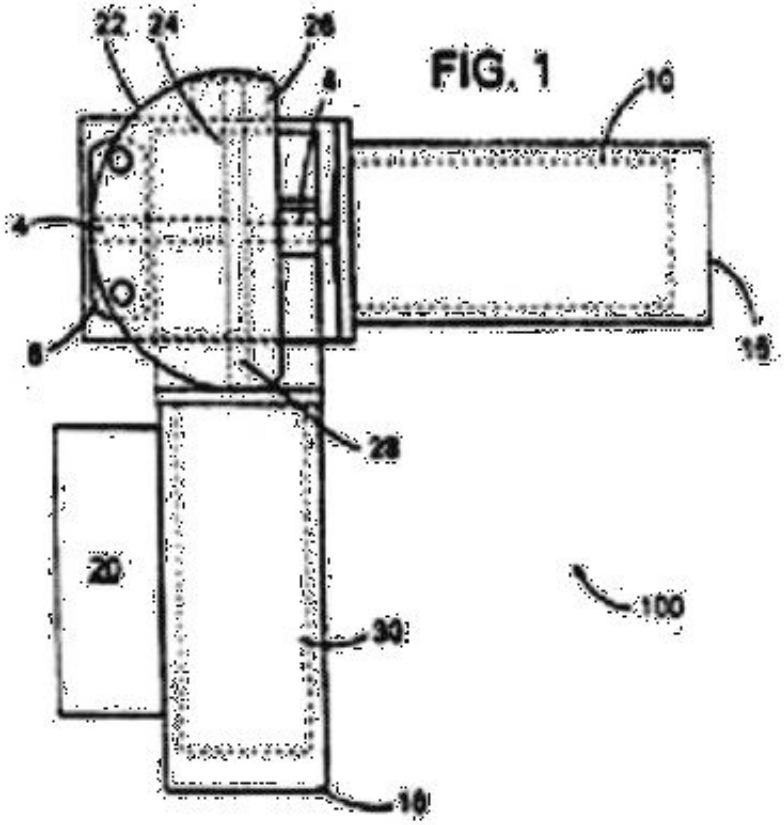

FIG. 1

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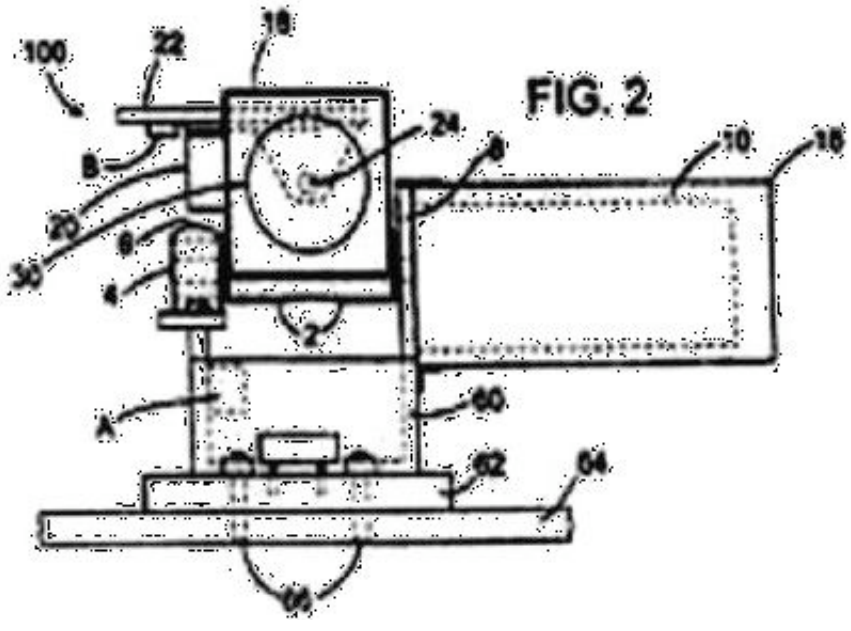

FIG. 2

As was made clear during the pre- *Markman* tutorial in this matter, the Perfect Horizon is a two-axis gimbal-based device utilizing motion sensors to feed information to motor(s) to maintain the stability of an attached device (here, a motion picture camera) while in motion. Gimbals, whose origins can be traced to ancient times, use a pivoted support to allow rotation of an object about an axis; with a set of two gimbals, as contained within the Perfect Horizon, one is mounted on the other with pivot axes orthogonal (meaning having a set of mutually perpendicular axis) so as to allow an object mounted on the innermost gimbal to remain vertical regardless of the motion of its support.

Defendant Mako Productions Inc. subsequently began to manufacturer a similar two-axis gimbal-based movie camera stabilization device known as the MakoHead. The parties have been mired in litigation ever since, with the present patent infringement case now in its fifth year. Most of that time has been spent before the Patent and Trademark Office ("PTO") in a re-examination proceeding instituted by defendant, arguing principally, that the claims set forth in the '662 patent are not valid as they were anticipated or rendered obvious by the prior art in the form of other gimbal-based devices, notably the Actively Stabilized Platform System invented by Raymond Welch in 1999 (Patent No. 5,922,039 ("the Welch patent")), and the Stabilized Platform invented by George Duckworth in 1979 (Patent No. 4,143,312 ("the Duckworth patent")), embodiments of which are depicted below:

DUCKWORTH PATENT

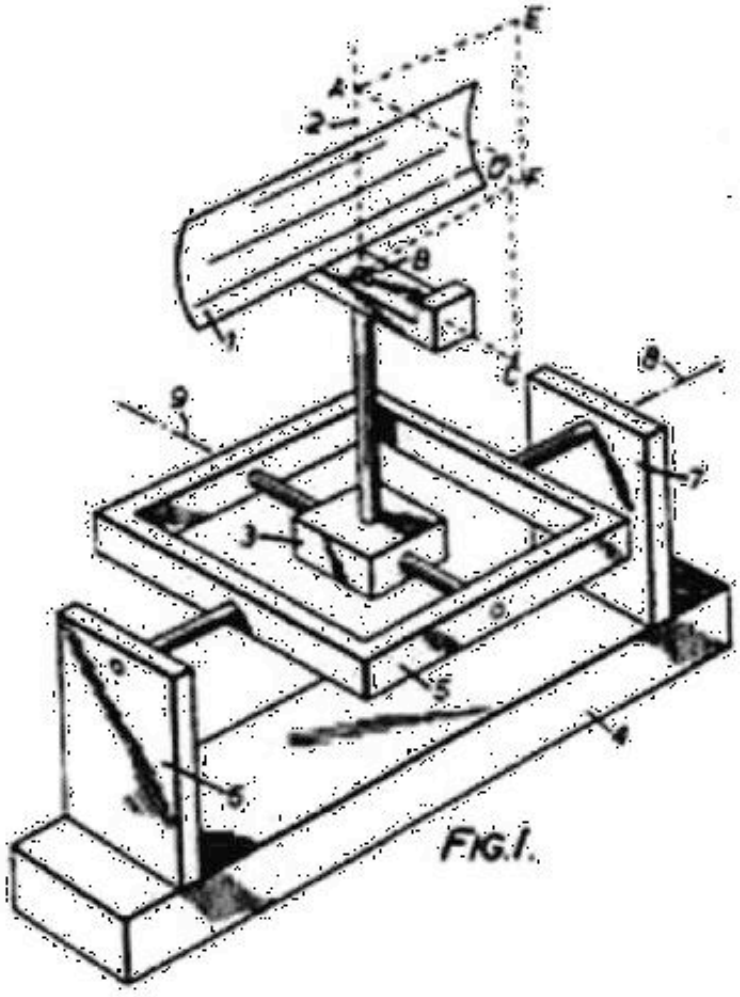

FIG. 1.

WELCH PATENT

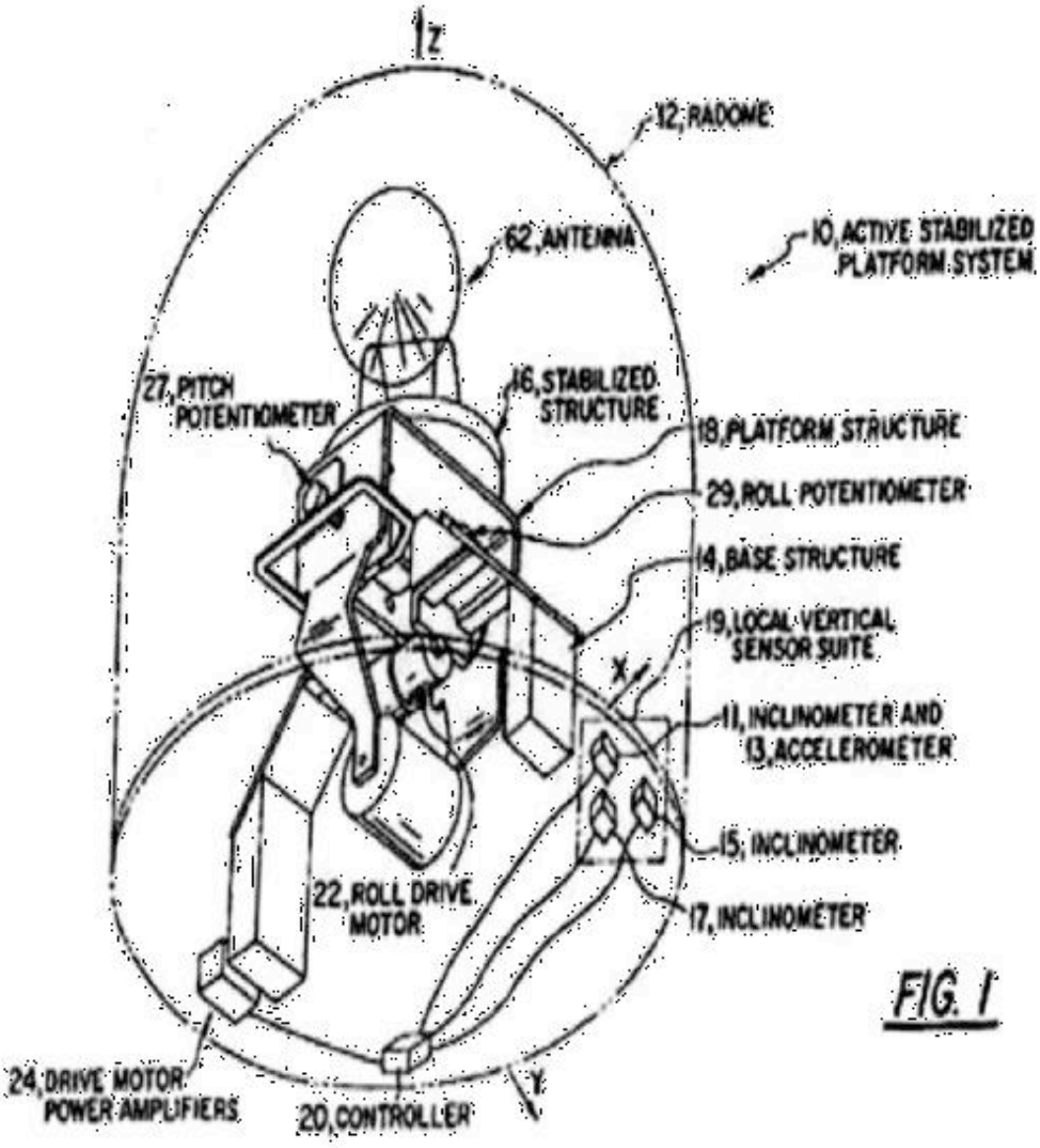

FIG. 1

The initial PTO re-examiner issued a preliminary finding that rejected 22 of the 38 claims in the '662 patent based upon the prior art cited by defendants, including the Welch and Duckworth devices. Before these initial determinations were finalized, the PTO transferred the reexamination of the ' 662 patent to a new examiner. Early last year, on March 4, 2008, the new re-examiner, relying on certain representations made by Grober during the re-examination proceedings, distinguishing the '662 patent from the cited prior art, rejected the findings of the initial examiner, affirmed many of the claims that had been previously rejected, and sent a communique closing the Office's prosecution of the reexamination of the '662 patent. That communique was followed by a second one in the summer of 2008 that reaffirmed many of the claims in the patent and the closure of the reexamination's prosecution upon consideration of certain responses sent by the parties (the contents of both communiques and responses filed by the parties thereto are discussed more fully below). (*See* Defs' Op. Br., Ex. B & Pl's Reply, Ex. 2).

Before this Court is the task of determining the meaning of various claim terms contained in the '662 patent, an exercise the Court ultimately finds to be largely shaped by what occurred during the PTO re-examination proceedings. As defendants' correctly observe, "[t]he prosecution history of the '662 patent is critical to this Court's claim interpretation due to the narrowing of the claims that was conceded by Grober [during the re-examination proceedings] in order to avoid a significant body of prior art." (Defs' Opening Br. at 11).

ANALYSIS

Construction of Claim Language In Claims to '662 Patent

Claim one to the '662 patent serves as the foundation upon which much of the other claims in the patent are built; accordingly, the Court will focus on it in construing much of the language at issue in this case. Claim one in the ' 662 patent provides in full:

A stabilized platform comprising:

a payload platform for supporting an article to be stabilized; a base;

a stabilizing system connected between the payload platform and the base, the stabilizing system including means for moving the payload platform with respect to the base about two different axes for providing the payload platform with stabilization in two dimensions;

a first sensor package for determining, in two transverse directions, motion of a moving object on which the stabilized platform is mounted;

a second sensor package comprising sensor means for sensing a position of the payload platform and for providing information based on the position of the payload platform relative to a predetermined position; and

a control system connected to the means for moving for stabilizing the platform in response to information provided by the first sensor package and the second sensor package, **wherein the second sensor package is fixed to the payload platform, and the first sensor package is fixed with respect to the base.**

Out of this lengthy description, the parties spar over the meaning of many phrases, the most critical one being "payload platform." FN1 Defendants attempt to narrowly interpret the phrase (avoiding infringement), while plaintiff seeks to give the term as broad a reading as possible (triggering infringement).

FN1. The other claim lanugage in dispute includes: "Determining (or sensing) motion of the moving object (or vehicle)"; "first sensor package"; "second sensor package"; "fixed to the payload platform"; "fixed with respect to the base"; "level sensor"; "predetermined position"; "means for moving"; "sensor means for sensing"; "sensor means or providing"; "first sensor package for determining"; "a control system for stabilizing"; and "control system for continuously stabilizing and correcting." Defendants request that the Court also construe several means-plus-function terms in the '662 patent mentioned above that seem to be trivial in importance to the case ("means for moving"; "sensor means for sensing"; "sensor means for providing"; "first sensor package for determining"; "a control system for stabilizing"; and "control system for continuously stabilzing and correcting"). Moreover, from reading the parties' briefs, it appears that a number of the other proposed claim language requested to be construed is not truly in dispute given that the parties either agree on the meaning or one side did not even bother to provide a contrary interpretation:

"first sensor package anomalies" (Pl's Reply Br. at 27 ("both parties agree")); "rate sensor" (Pl's Reply Br. at 28 ("patent owner accepts this description" as given by defendants with certain modifications)); "rate of motion sensors" (Pl's Reply Br. at 28 ("the patent owner accepts this definition" with certain modifications).

Because nearly all the other terms in the patent's claims are dependent upon the question of what exactly is meant by the term "payload platform," the Court has confined its focus on that term for purposes of its *Markman* decision. Construing the meaning of the other disputed claim terms is unnecessary given the conclusion the Court reaches in regard to the meaning of the claim term "payload platform" and the fact that the parties did not dispute during oral argument that, with such a construction of the term, the accused device would not infringe the '662 patent.FN2 *See* 5A DONALD S. CHISUM, CHISUM ON PATENTS s. 18.03[1][b] at 18-96.5 to 18-96.8 (2007) ("Often a patent owner and an accused infringer dispute the meaning of more than one word or phrase. Resolution of any one of the disputed words or phrases may be sufficient to resolve an infringement claim against a patent owner. Decisions vary whether a district court ... should address all disputed words or phrases (as a form of alternative findings or holdings) or only such as necessary to resolve an issue of infringement or validity. Of course to confine the focus on a dispositive claim word or phrase, the court must be aware of the nature of the accused product or process or have the benefit of a concession from the parties that resolution of one or more disputed words or phrases is dispositive").

FN2. Although plaintiff's counsel did not make any statement on the point one way or the other during the *Markman* hearing, in its reply brief it did acknowledge that defendants' proposed construction of the term would take it out of infringing the '662 patent. (Pl's Reply at 2 (decrying defendants' proposed construction of "payload platform" as "an effort to allow the MakoHead accused product to skirt infringement")).

Payload Platform

Each parties' claim construction of the relevant term in the '662 patent is listed as follows:

Disputed Term	**Defendants' Proposed Const.**	**Plaintiffs' Proposed Const.**
Payload Platform	The platform on which the payload (e.g., a camera) is directly mounted and not any other element of the device	Of rigid construction, either as a solid manufactured piece or as a rigid construction of pieces which together form the payload platform, and to which payloads can be attached. It comprises the structure of the '662 device that is stabilized from the motion imparted by the vehicle or moving object upon which the '662 device is mounted, and it is the structure that is moved by the 'means of moving.'

Neither parties' formulation is very illuminating, but for different reasons: Defendants' construction is not specific or precise, but is all too self-referential (a payload platform is the platform where the payload is affixed); plaintiff's formulation is simply indecipherable and unintelligible as it gives no meaning to the term (a payload platform is something which forms a "payload platform structure"). That said, it does seem apparent from the parties' accompanying arguments that defendants' seek to limit the payload platform to the horizontal surface or plate upon which the device in question is directly mounted or affixed, while

plaintiff seeks to include within the term not only the horizontal surface or plate but also the supporting structure thereto, namely struts, legs, etc., that is then attached to and moves in conjunction with the motors or other means of moving. (*Compare* Defs' Reply at 8 ("the definition proposed by Defendants ... limits the structure to the horizontal piece that holds the camera") *with* Pls' Reply Br. at 6 ("the payload platform ... is the entirety of the platform that is stabilized by the device" or stated another way "a single machined element that attaches to the motors or means for moving and includes the horizontal attachment plate")). With this understanding and refinement of the parties' respective proposed constructions, the Court now turns to determining which most aptly captures what is meant by the term as used in the '662 patent.

Turning to the language contained in the patent, both sides make much of the fact that the '662 patent alternately speaks of the payload platform as the "camera support platform 22" or a "platform for supporting an article to be stabilized" (*see* Col 4, lines 39-40 ("sensor package B [(the second sensor package)] is mounted on the camera support platform") and Col. 2, lines 1-3 ("In accordance with one aspect of the present invention, a stabilized platform includes a payload platform for supporting an article to be stabilized")). Defendants argue that, by specifically linking the concept of the payload platform to the device in question (the camera), the patent plainly directed that it was only that portion of the invention upon which the device is affixed or mounted, and not the remainder, that was covered. Plaintiff counters by focusing on the use of the word "support" as indicating that the "platform" extended beyond the area where the device was affixed or mounted to the length of the structure that attached the device to the means of moving (e.g., motors).

The Court is not persuaded by either sides' argument, as each proposed definition suffers from the same imprecision as that of the term it is being used to substitute. That the word "camera" is mentioned does not necessarily mean that the platform in question is limited to just the top of the tripod/structure. Nor is the fact that the '662 patent provides that the payload "platform ... support[s] an article to be stabilized" necessarily mean that such support *must* include not only the immediate area providing such support (that is, the horizontal attachment plate) but also the metal legs or struts coming off of the horizontal plate that affixes that plate to the rest of the device. Simply put, it is not clear to the Court that the different linguistic formulations of the relevant aspect of the device was intended to serve, or indeed does serve, as a means to delimit or otherwise define the precise scope of how far down the device a payload platform is considered to extend.

Rather, it appears these alternative formulations for the part of the device in question are as unilluminating on the precise question at issue in this case ___ what is the extent of the platform? ___ as the original formulation of "payload platform." The reformulations do not specifically point, one way or the other, to how far down the support structure the word "payload platform" extends, whether that be just to the mounting plate or further down to the support structure holding/attaching the mounting plate area to the rest of the invention's structure. Instead, they speak in broad terms that could be read to support either proposed definition.

Telling in this regard is the fact that, when using the alternative phrasing "camera support platform," the '662 patent makes references to item 22 in FIGS 1 and 2 of the preferred embodiments. As made apparent during the *Markman* hearing, it is not entirely clear (especially in connection with FIG 2) whether item 22 is simply the horizontal plate, or if it also includes the hatched lines forming a triangular shape revealing the support structure connected to the horizontal plate (that is, those hatched lines which appear to connect the horizontal plate to the invention's motorized apparatus).

The parties' reference to the dictionary is equally unilluminating, as it too is subject to supporting either party's construction. The dictionary defines a "platform" as "a device or structure incorporating or providing a platform especially such a structure on legs used for offshore drilling (as for oil)." MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 891 (10th ed.1999). Such a definition could support, although does not require, the notion that the part of the device performing the function of a platform (or at least being encompassed within it) extends beyond the flat horizontal attachment plate to the support structure. The Court emphasizes the word "could" because the definition speaks of a "structure on legs." Thus, it is equally possible that the definition seeks to separate the relevant "structure" from the "legs" that support it; the "structure" being the horizontal platform. Another dictionary definition emphasizes the horizontal attachment plate as being the relevant part of the invention performing the function required by the term "platform": "A raised horizontal surface especially a raised flooring." *Id.*

As can be discerned from these competing dictionary definitions, a platform can either be viewed as the horizontal surface upon which a person or device stands or rests, or it can extend to the supporting struts or legs holding the horizontal surface aloft.

In the end, the Court finds that what is key to deciphering the meaning of this term is the comparable structures mentioned in prior art concerning gimbal-based devices, and how that prior art was discussed and distinguished by both Grober and the PTO during the re-examination of the '662 patent. Specifically, an understanding of what specific structural aspect of the prior art Grober and the PTO re-examiner were talking about in relation to the "payload platform" provides meaningful insight into what part of the '662 patent is sought to be captured through use of that term in the '662 patent itself.FN3 Notably, in Howes v. Medical Components, Inc., 814 F.2d 638 (Fed.Cir.1987), the Federal Circuit held that the prosecution history of a reissue application must be considered in interpreting a claim *even when the claim appeared in the original patent and was not altered or amended during the reissue proceedings*. Similarly, in Standard Oil Co. v. American Cyanamid Co., 774 F.2d 448 (Fed.Cir.1985), the Federal Circuit held that a disclaimer or concession made by a patent owner during reissue proceedings is binding as to the interpretation of the claim. As one district court noted: "The arguments and amendments made by the patent owner during the prosecution are pertinent to claim interpretation.... They also limit the allowable equivalents under the doctrine of equivalents.... This prevents the patent owner from construing the claims narrowly before the PTO and broadly before the courts." Total Containment, Inc. v. Environ Prods., Inc., 921 F.Supp. 1355, 1389-90 (E.D.Pa.1995).

FN3. Although not recited in the body of this Order, the Court is mindful of and has employed the standards set forth in Phillips v. AWH Corp., 415 F.3d 1303, 1312-17 (Fed.Cir.2005), that in executing the *Markman* mandate the Court must follow certain rules ranking in importance various sources of evidence (*i.e.,* intrinsic and extrinsic evidence, and that within those broad categories there is a hierarchical ranking of subcategories of such evidence) to elucidating the meaning of claim terms.

This principle applies with equal force to a patent owner's construction of claims made during reexamination proceedings in order to avoid prior art. "[A]rguments made to distinguish prior art during reexamination proceedings are retroactively applied to limit the scope of a claim limitation as of the issue date of the patent, not the date those arguments were made." Intermatic Inc. v. Lamson & Sessions & Co., 273 F.3d 1355, 1367 (Fed.Cir.2001), *vacated on other grounds,* 535 U.S. 722, 122 S.Ct. 1831, 152 L.Ed.2d 944 (2002).

PTO Re-examination Proceedings

It is clear to the Court that, through arguments advanced by Grober during the reexamination proceedings, amendments to the patent he submitted in connection therewith, as well as the PTO's subsequent adoption of at least one of those arguments, the defining characteristic of the '662 patent which distinguish it from a long line of prior art concerning two-axis gimbal based devices (most notably the Welch and Duckworth patents) was the fact that the '662 patent "requires 'the second sensor package [be] fixed to the payload platform."

This distinguishing feature of the '662 patent is central to defendants' most persuasive argument: If the payload platform is more than just the horizontal plate or surface upon which the camera is directly affixed, then the '662 patent runs up against the prior art should it be demonstrated that sensors from the second sensor package in the prior art similarly showed them affixed to the metal support/struts/legs to the horizontal plate. If that is the case, then the PTO's finding (and Grober's similar representation to that effect to the PTO re-examiner) that the prior art did *not* teach that there were sensors from the second sensor package on the "payload platform" must mean, logically, that such supporting legs/struts are not and cannot be considered part of the payload platform in the '662 patent. To hold otherwise would be to render large parts of the claims in the '662 patent invalid as being anticipated or rendered obvious by the prior art in Welch and Duckworth. To understand whether there is anything to this argument, it is important to understand the particulars of the Welch and Duckworth's devices, the arguments advanced before the PTO re-examiner in regards to the prior art, and the PTO re-examiner's resolution of those arguments.

Welch device

Welch described the critical part of his invention in the '039 patent as follows: "FIG. 1 illustrates the active stabilized platform system in one embodiment of the present invention. FIG. 2 is an enlarged view of the stabilized structure of the first embodiment of the present invention." With respect to the "stabilized platform system," Welch made clear that there were three subparts comprising it:

The principle mechanical design will be discussed first. There are three major mechanical subassemblies of the stabilized platform: (1) the protective enclosure or radome 12, (2) the base structure 14, and (3) the stabilized structure 16, which further includes a platform structure 18 and a counterbalance structure 21. FIGS. 1 and 2 show the stabilized structure 16 and these subassemblies. Each of the three (3) subassemblies serves a specific purpose in the overall active stabilized platform system 10.

It is this last subassembly, the stabilized structure and its accompanying subassemblies, that was the focus of the re-examination proceedings related to Grober's '662 patent and the present *Markman* hearing. As best the Court can tell, Welch further divided his stabilized structure as including within it a platform structure and a counterbalance structure. The stabilized structure was the equivalent of the '662 patent's flat horizontal plate, as it was the part of the Welch invention upon which the antenna was directly mounted and touching the plate. The question remains ___ what to make of the platform structure? On FIG 1 to the Welch patent it shows that a sensor, the pitch potentimeter item 27, is affixed to the "platform structure" which appears to include both horizontal surface as well as the vertical legs or support structures.

Duckworth device

Duckworth described the critical part of his invention in the '312 patent as follows:

FIG. 1 is a schematic view of a conventional stabilized platform.... Referring to FIG. 1, a radar antenna 1 is mounted to be rotated about the azimuth axis 2 upon a stabilized platform 3. The stabilized platform 3 is carried from the deck of a ship represented at 4 by a two axis gimbal system, consisting of a frame 5 carried from two supports 6 and 7 fixed to the deck of the ship 4. The frame 5 is mounted between the two supports 6 and 7 so as to be capable of rotation about a horizontal roll axis 8. The stabilized platform 3 is mounted within the frame 5 so as to be rotatable about a horizontal pitch axis 9, the axes 8 and 9 being orthogonal.

So item 3 in the Duckworth device is the equivalent of the horizontal plate in the Grober '662 patent. It would appear that item 5 is the most equivalent to the metal legs or support to the horizontal plate on the Grober '662 patent.

This raises the question of where Duckworth calls for his sensors to be placed. And herein lies the problem: It is not at all clear that the Duckworth patent calls for a specific location for the sensor to be placed; instead it emphasizes that wherever the sensor is placed it must be able to measure certain movement along the two axis. As Duckworth explains:

Referring to FIG. 2, this is a schematic diagram of the error signal detection and control system provided in respect of one of the axes 8 and 9 of FIG. 1.... Again the antenna is represented at 1. The synchro transmitted 10 is arranged to detect movement of the aerial 1 about the roll axis 8, i.e., movement of the frame 5 relative to the supports 6 and 7 about axis 8.

From reading this, and then looking at the schematic in question, it is hard to decipher were, if anywhere, the synchro item 10 is attached or affixed to the device.

Resolution by the PTO

Among the twenty-nine grounds proffered in its re-examination of the '662 patent, defendants argued in grounds one, two, and eleven that claim 1 and certain other dependent claims in the patent were anticipated or rendered obvious by Welch (grounds one and two) or Duckworth (ground eleven). Ultimately, the PTO re-examiner agreed with Grober and did not adopt grounds one, two, or eleven. However, in doing so, the PTO re-examiner drew a distinction ___ advocated by Grober ___ between the '662 patent and the Welch and Duckworth patents that served to place a limit on the claim terms contained in the '662 patent. Specifically, the PTO re-examiner noted that it was the failure in the Welch or Duckworth prior art to fix sensors from the second sensor package to the payload platform that made the '662 patent device distinguishable and thus patentable:

Claims 1-13 are confirmed because the prior art of record fails to teach or make obvious a stabilized platform having a second sensor package that is fixed to the payload platform as recited in claim 1. The inclusion of a second sensor package being fixed to the payload platform defines patentability over the prior art of record because it defines a distinguished structure of a stabilized platform which is not taught or made obvious by the prior art of record alone or in combination.

However, as to what parts of the prior art were considered to be analogous to the '662 patent's "payload platform" (and by extension what was meant by use of that term in the '662 patent) differed from those advanced by Grober during the re-examination proceedings (as detailed below); it is this interplay between the position advocated by Grober and defendants, and the PTO re-examiner's resolution of the same, that is highly probative of the central claim term at issue here.

In articulating why the grounds put forward by defendants were mistaken, Grober emphasized the importance of the payload platform in his device, especially in relation to the positioning of the second sensor package. First, Grober sought to amend the claims in the '662 patent in several places to emphasize the point that, in the '662 patent, the "second sensor package ... is wholly fixed to the payload platform." (Defs' Am. Opening Br., Ex. E at 10, 13, & 15 ("patent owner, in the amendment filed on 12/20/05 ... explained the fundamental difference between Welch and the '662 patent 'by point[ing] out that claim 1 ... requires "the second sensor package is fixed to the payload platform," and argued that Welch does not teach this limitation' ")). As explained by Grober to the PTO re-examiner, "the wording 'Fixed to' found in claim 1 ... especially within the context of Grober's patent specifications and drawings show that no part of the second sensor is fixed to anything other than the payload platform. Therefore by definition it is 'wholly fixed to'. Grober FIG 2 item B, and FIG 3 item B, and FIG 13 item 38, clearly show the sensor as 'wholly fixed to' the payload platform." (Defs' Am. Opening Br., Ex. E at 23-24).

Next, Grober argued that neither the Welch nor the Duckworth patents taught this requirement for their devices to work. "The amendment precludes any possible terminology confusion when comparing with Welch and Duckworth's potentiometers, encoders, synchros or resolvers which are clearly identified in their specifications and figures as not wholly on the payload platform. Welch never uses the words 'fixed to' or 'mounted on' to describe his potentiometers 27 and 29. They are clearly not 'fixed to', and most definitely not 'wholly fixed to' Platform Structure 18. Welch and Duckworth would not work if they were." (Defs' Am. Opening Br., Ex. E at 24).

Grober also commented on the location of the payload platform in the preferred embodiments to the '662 patent. Grober thus remarked that, unlike the prior art, the '662 patent taught that, using "the wording 'fixed to' found in claim 1, and the wording 'mounted on' in claim 4 especially within the context of Grober's patent specifications and drawings *show that no part of the second sensor is fixed to anything other than the payload platform*. Grober FIG. 2 item B, and FIG. 3 item B, and FIG 13 item 38, clearly show the sensor as 'wholly fixed to' the payload platform." FN4 (Defs' Am. Opening Br., Ex. E at 23-24). Interestingly, in those figures (*see* FIGs 2 and 3, whose depictions are illustrated above) mentioned by Grober, the sensor (item B in FIGs 2 and 3) is shown attaching to the horizontal plate upon which the camera is directly fastened, not to the supporting structure or struts to the plate. At oral argument during the *Markman* hearing, however, Grober correctly noted that in FIG 2 to the ' 662 patent there is a hatched line that could indicate that the area encompassed by item 22 extended *beyond* the horizontal surface to what appears to be legs supporting that horizontal surface. However, it is also equally clear that the relevant sensor depicted in FIG 2 to the ' 662 patent, that is, item B, is also clearly shown as being affixed to the flat horizontal portion of item 22 and not the hatched line area pointed to by Grober (assuming Grober is correct and item 22 extends beyond the flat horizontal plate to the supporting legs thereto).

FN4. Claim four in the '662 patent referenced by Grober in his pleadings before the PTO stated: "The stablized platform of claim 1, wherein the second sensor package is mounted on the payload platform."

Nevertheless, in the PTO reexamination proceedings, Grober also went on to specifically describe what parts of the devices in the prior art he viewed as being a comparable to the '662's "payload platform." In speaking of the Welch invention before the PTO, Grober wrote "Welch never uses the word 'fixed to' or 'mounted on' to describe his potentiometers [sensors] 27 and 29. They are clearly not 'fixed to,' and most definitely not 'wholly fixed to' Platform Structure 18." FN5 (Defs' Am. Opening Br., Ex. E at 24). Later, in

the same response submitted to the PTO, Grober made the following observation about the Welch patent: "Are potentiometers and encoders [in the Welch patent] 'fixed to the payload platform'? Grober submits they are not. If they were, they would not work. Grober submits that his terminology in view of his claim 1 wording 'fixed to the payload platform' is clearly shown in Grober's drawings and specifications as well as dictated by the sensor type to be wholly 'fixed to the payload platform.' Welch and Duckworth's potentiometers are not wholly fixed to the payload platform, nor are they even 'fixed to the payload platform' because they would not work if they were." (Defs' Am. Opening Br., Ex. E at 40-41). As explained by Grober: "[Defendant] proposes that Welch's position sensor(s) 27 and/or 29 are fixed to platform 18, the equivalent of Grober's payload platform. This is not supported by Welch's claims, specification or figures. Welch's second sensor package is two distinctly separate sensors located in two separate positions at the gimbal between the framework parts. The parts are not attached or fixed to the payload platform.... Pitch Potentiometer 27 is shown fixed to the frame structure of which Platform Structure 18 rocks within." (Defs' Am. Opening Br., Ex. E at 42-43).

FN5. Grober similarly distinguished Ducksworth device on the grounds that the sensors were not fixed to the payload platform on that device. (Id. at 58).

Notable from this discussion is that Grober argues that the structure on the Welch gimbal-based device that is comparable to his payload platform was FIG 1 item 18 (the Platform Structure) in the Welch patent. What is remarkable about this assertion is that the Platform Structure identified in the Welch patent was not just the horizontal surface upon which the device in question (an antenna) was mounted, that item being item 16 the Stabilized Structure. Instead, FIG 1 item 18 to the Welch patent was comprised of the struts and supports upon which the Stabilized Structure was affixed and which were themselves connected to the motor used to maintain the stability of the antenna. Even more remarkable is that, despite Grober's assertion that no part of the potentiometers (again defined by Grober as being items 27 and 29 in the Welch patent) were "even fixed to the payload platform" (which again he defined as item 18 to the Welch patent), it is not entirely clear that is the case. From a review of FIG 1 to the Welch patent, it is not clear whether or not sensor 27 is affixed to item 18 Platform Structure or is affixed to something else. Sensor 27 is depicted as being affixed to a raised squarish object that is itself either attached to or is part of the Platform Structure. Nowhere does the preferred embodiment in FIG 1 or in the Welch patent identify whether or not this raised squarish part is considered part and parcel of the Platform Structure.

Nonetheless, Grober sought to reinforce this point in his response to the reexamination: "Requestor proposes that Welch's position sensor(s) 27 and/or 29 are fixed to platform 18, the equivalent of Grober's payload platform." (Defs' Am. Opening Br., Ex. E at 42). Grober thus again points to the "framework parts" as being part and parcel of the payload platform, and then goes on to rebut the argument that in the Welch patent the sensors are affixed to platform item 18, noting instead that the sensors were taught in Welch's device as one being affixed to "the frame structure of which Platform Structure 18 rocks within" and the other sensor "fixed to the Base Structure 14." (Id. at 43). That the support structure to the flat mounting plate were all considered part of the payload platform by Grober was made plain by his statement to the PTO re-examiner that the sensors used on the Welch device are not described as " 'fixed to the payload platform' or Welch's Stabilized structure 16, or its attached Platform Structure 18." (Id. at 46-47). Again Grober lobbed the mounting plate (the Stabilized Structure item 16 in FIG 1 to Welch's invention) and the support to that plate (the attached Platform Structure item 18 in FIG 1 to Welch's invention) as part and parcel of the "payload platform."

The PTO examiner was not convinced by Grober's argument over whether item 27 was or was not affixed to item 18. "[The] examiner notes that neither the patent owner's argument nor the requester's argument is found persuasive because figure 1 of Welch does not clearly show whether sensors 27 or 29 are fixed to the payload platform or not. Frankly, one can not say with certain [ity] by looking only at the figure." (Defs' Am. Opening Br., Ex. B at 16).

Instead it was another argument that would convince the PTO examiner that the '662 patent was distinguishable from the prior art, an alternative argument that Grober directed to the claim language found in the Welch patent.

Grober noted to the PTO that claim 30, column 12, lines 18 to 22, to the Welch patent provided that "said first sensor; a first drive motor for rotating said stabilized structure about a first axis, and said dual-axis gimbal, *being mounted between said stabilized structure and said base structure*." From this it was argued that the Welch patent implied that the portion of the device that the second package of sensors were fixed to was not the payload platform but an area *between* the base and the stabilized structure. The obvious implication being that the stabilized structure (*i.e.,* item 16 in FIG 1 to the Welch patent) was considered the payload platform, it being the only area left that could fill such a role without having a sensor attached to it. Thus Grober, in this alternative argument, asserted by implication that the horizontal plate/surface in the Welch patent, upon which the antenna was directly affixed, was considered the payload platform. The PTO examiner accepted this argument and found that item 16 in FIG 1 to the Welch patent, the Stabilized Structure, was the equivalent of the payload platform found on the '662 patent. "Examiner agrees with the patent owner's argument. Claim 30 of Welch clearly teaches the second sensor package (sensors 27 and 29) being mounted *between* the stabilized structure (16) and the base structure (14). Thus, Welch does not teach the second sensor package is fixed to *the payload platform 16*. ... because Welch does not teach a second sensor package being fixed to the payload platform, Welch cannot anticipate claims 1, and 34-36 of the '662 patent." (Defs' Am. Opening Br., Ex. B at 17). Grober did not challenge this finding by the examiner in the responses he later tendered to the PTO re-examiner's action closing the prosecution of the reexamination. (Pls' Reply Br., Ex. 2 at 10 ("In the responses, patent owner and requester did not comment on the reasons set forth by the examiner").

The same process played itself out with respect to the Duckworth patent. It was argued by Grober that "the fundamental difference between Duckworth and the '622 patent" was that "Duckworth does not teach the limitation that the second sensor package being fixed to the payload platform as required" by claim 1 in the '662 patent. (Defs' Am. Opening Br., Ex. B at 30). Defendants responded that the Duckworth patent teaches that "the synchros [that is, sensors] are fixed *to the gimbals* of stabilized platform 3." In other words, defendants pushed what was considered the equivalent payload platform in the Duckworth patent to extend beyond the horizontal surface upon which the device (the antenna) was directly affixed (item 3 in FIG 1) to include the "gimbals" or support structure holding item 3 in place. The PTO examiner was not persuaded by defendants' argument, finding that it conflated the gimbal system itself with the payload platform on the Duckworth patent, item 3 the Stabilized Platform. "Duckworth teaches a payload platform 3, a base 4, a stabilizing system which includes a gimbal system (frame 5 and supports 6 and 7) and motors 16, a first sensor package 12 and a second sensor package (synchro 10). As it is clear ... payload platform 3 and gimbal system are distinct elements and cannot be lumped together. Thus, Duckworth teaches the second sensor package is mounted on the gimbal system, not the payload platform." (Defs' Am. Opening Br., Ex. B at 30). From this it is apparent that the PTO re-examiner classified (and Grober advocated for) item 3 on the Duckworth patent as being the equivalent to the payload platform in the '662 patent. This is important because item 3 again is simply the horizontal surface or plate upon which the device (an antenna) is

mounted, implying again that it is this mounting surface upon which a device (such as an antenna or a camera) in question is directly affixed, not the supporting brackets or struts that constitutes the payload platform for purposes of the '662 patent.

Now Grober argues that item 3 in the Duckworth patent is comprised of more than just the "rigid platform" or "box" to which a line is drawn toward in FIG 1 to the patent's preferred embodiment, but also the "shaft attachment points" connecting the box to both the gimbal to the side as well as the antenna above. Instead, Grober argues that the payload platform in the Duckworth patent is akin to an inverted platform, with the legs, struts, going upwards from the flat horizontal surface. As explained in his papers, "Duckworth's payload platform 3 is the rigid platform which comprises both the vertical box uprights to which the axis shafts indicated along the axis 9 are attached, as well as the horizontal top plate to which is then mounted the radar antenna 1, attached to another vertical axis." (Pl's Reply at 4). The problem for Grober is there is no indication in the Duckworth patent that these "attachment points" are in any sense of any substance (other than their connectivity of the various parts of the particular embodiment of the device) as being considered part and parcel of item 3, which is clearly identified in the patent and the identification line drawn in FIG 1 of the preferred embodiment as the "rigid platform" or "box." Grober's argument on this point thus suffers for much of the same reasons as his argument over the sensor placement of item 27 in the preferred embodiment to the Welch patent.

Given the admissions and representations made by Grober during the reexamination proceedings, and giving context to the prior art, it is apparent that the payload platform is the flat horizontal metal plate to which the camera is attached *and nothing else,* be it the metal arms or legs immediately supporting that plate, which are in turn connected to the motors continuously moving about to keep the camera stabilize by correcting the movement of the base. Those other parts of the "structure" (the motors, support struts, legs, etc.,) do not comprise the payload platform. Thus, the motors and support structures beyond the ones directly attached to the horizontal mounting plate would not be part of the payload platform.

Given the parts of the relevant FIGS in the Welch and Duckworth patents that the PTO reexaminer concluded were considered the "payload platform," it is evident that, Grober's present argument notwithstanding, the term as used in the '662 patent was meant to refer to the horizontal plate or surface upon which the relevant device is affixed or mounted. If the Court were to hold otherwise and include the supporting struts, legs, etc., as advocated by Grober, then not only would this be inconsistent with the position advocated by him and then adopted by the PTO during the re-examination proceedings, but it would render claim 1 in the '662 patent invalid as it would have been rendered obvious or anticipated by the prior art. And it is in this respect that the Court finds defendants' proposed construction is correct because, as their Markman brief makes clear: "The definition proposed by Defendants ... limits the structure to the *horizontal* piece that holds the camera." (Defs Reply at 8).

Accordingly, as the re-examination proceedings make plain and a review of the prior art discloses, the Court finds that a "payload platform" is nothing more than just a raised flat horizontal surface upon which a device (be it an antenna or a camera) is directly mounted and touching, it does not include the support structure to that horizontal surface from which it is attached to the rest of the device or to any other part of the device.

The Court accordingly construes the claim term "payload platform" to mean "the horizontal plate, piece or surface upon which the device (e.g., a camera) is directly mounted upon or affixed to."

Given that such a definition results in a finding of non-infringement, the Court concludes its analysis on this

point and goes no further in construing the many other terms offered for consideration by the parties in their *Markman* briefs.

IT IS SO ORDERED.

C.D.Cal.,2009.
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