UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

CIVIL ACTION NO. 18-10296-RGS

ENOVATE MEDICAL, LLC

v.

DEFINITIVE TECHNOLOGY GROUP, LLC

MEMORANDUM AND ORDER ON
CLAIM CONSTRUCTION

January 25, 2019

STEARNS, D.J.

Plaintiff Enovate Medical, LLC, alleges that defendant Definitive Technology Group, LLC (DTG), infringes U.S. Patent No. 7,782,607 (the '607 patent). Before the court are the parties' briefs on claim construction. The court heard argument, pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996), on January 24, 2019.

The '607 Patent

The '607 patent is entitled "Mobile Workstation Having Power System with Removable Battery Configured for Drop-In Engagement Therewith." The '607 patent was issued on August 24, 2010, from an application filed on February 25, 2008. It lists as its inventors Lee Melvin Harbin and Gary

Coonan. Enovate claims ownership to the '607 patent by assignment from Stinger Industries, LLC.

The '607 patent is directed to improvements in mobile workstations commonly used in hospitals and clinics for patient care.

> A typical mobile workstation includes a frame mounted on a wheeled base, and a work platform or the like mounted above the wheeled base. A computer display may be mounted on or in proximity to the work platform such that the mobile workstation can be transported about and computer-based activities performed at different locations.

'607 patent, col. 1, ll. 16-22.

> One shortcoming of many earlier mobile workstations was the requirement that they be plugged into a wall electrical outlet in a facility. It has become common for many mobile workstations to include a rechargeable battery carried thereon, so that connection to a wall outlet need only take place periodically for recharging. One consequence of using rechargeable batteries, however, has been the downtime and inconvenience required to recharge workstation batteries at a wall outlet. While certain rechargeable batteries can power a workstation for hours, the associated workstation is still idled for the typically lengthy recharging period. Thus, electrical cords are still needed at some point during a typical workstation's service cycle. Extra workstations may also be needed to ensure that a sufficient number are available for use by facility personnel at any given time, as certain workstations can typically be expected to be idled for recharging.

Id. col. 1, l. 65 - col. 2, l. 13.

To eliminate downtime and redundancy, the '607 patent discloses a mobile workstation equipped with a removable and replaceable battery system.

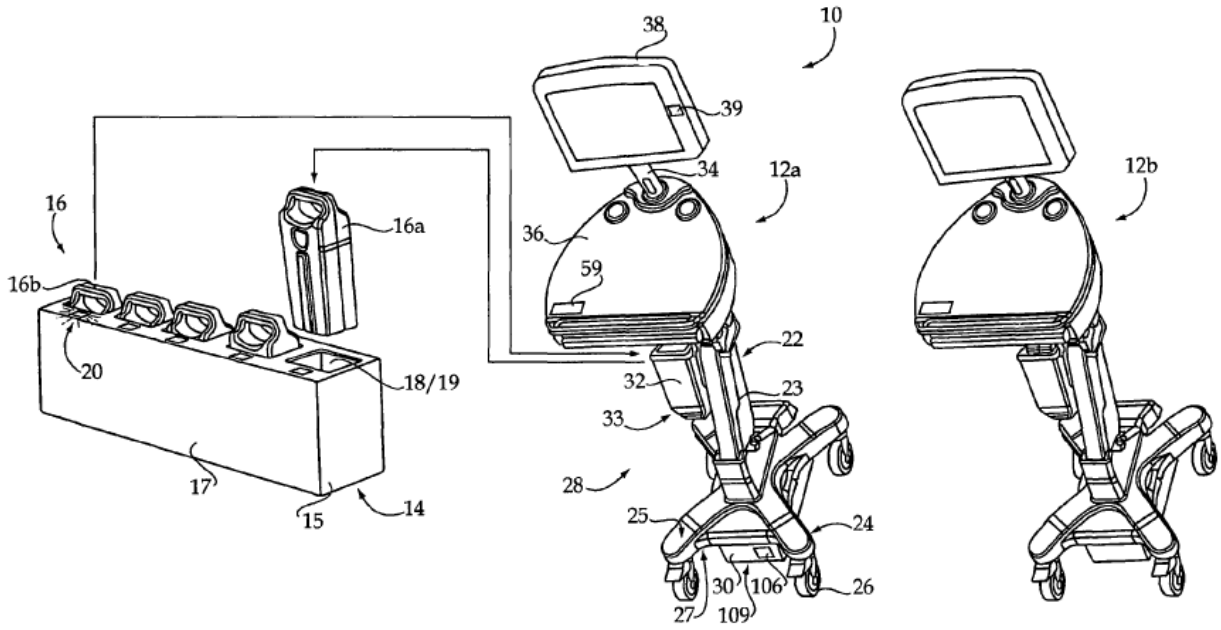

Figure 1

As illustrated by Figure 1,

> a first battery assembly 16a which includes a first battery of set 13 and a second battery assembly l6b which includes a second battery of set 13, are shown. When using workstation 12a, 12b of system 10, a battery docked with the corresponding docking station 32 may be swapped with a substitute battery once discharged. . . . By using a back-up battery 106 with each workstation 12a, 12b, operation of system 10 may be essentially seamless, and substitute batteries swapped with discharged batteries, without requiring workstations 12a, 12b to power down.

'607 patent, col. 4, ll. 48-66. At the claim construction hearing, counsel for both parties described the underlying concept as embodying "hot swap" technology.

The '607 patent sets out 16 claims, of which 11 are system claims, and 5 are method claims. Enovate asserts infringement of at least claims 1, 2, 12, 13, and 14. Asserted claim 1 is a representative system claim.

> 1. A mobile workstation comprising:
>
> a frame which includes a base having an upper side, a lower side and a plurality of wheels mounted at the lower side, the frame further including a mount for a computerized device at a location spaced from the base;
>
> a power system resident on the mobile workstation for supplying power to a computerized device positioned on the mount, the power system including a power bus and a battery docking station mounted to the frame at a location between the base and the mount and electrically connected with the power bus;
>
> the battery docking station further including a holster having an open end and an opposite blind end, and defining a guide extending from the open end to the blind end which includes a shape and an internal contour;
>
> a first battery; and
>
> a removable battery assembly which includes a second battery, the removable battery assembly being configured to dock with the battery docking station via engagement in the guide, and including a housing having a shape which is complementary to the shape of the guide and an external contour configured to mate with the internal contour of the guide;

wherein the removable battery assembly includes a charge state and a discharge state, the removable battery assembly being in the discharge state whenever docked with the battery docking station; and

wherein the power system includes an on state and an off state, the power system further including a plurality of power sourcing modes which each include supplying electrical power to the power bus from one of the first battery and the second battery, and the power system being in one of the plurality of power sourcing modes whenever the power system is in the on state.

Asserted claim 12 is a representative method claim.

12. A method of using a mobile workstation having a wheeled base, a frame coupled with the wheeled base and a computerized device mounted to the frame, the method comprising the steps of:

powering the computerized device of the mobile workstation with a removable battery assembly docked with a battery docking station of a power system resident on the mobile workstation, including discharging a battery of the removable battery assembly whenever the removable battery assembly is docked with the battery docking station and the power system is on;

decoupling the removable battery assembly from the battery docking station;

docking a substitute battery assembly with the battery docking station, including engaging the substitute battery assembly in a guide defined by a holster of the battery docking station at a location between the wheeled base and the computerized device, including discharging a battery of the substitute battery assembly whenever the substitute battery assembly is docked with the docking station and the power system is on;

powering the computerized device of the mobile workstation with the substitute battery assembly; and

> discharging a third battery whenever neither of the removable battery assembly nor the substitute battery assembly is docked with the battery docking station and the power system is on.

Enovate and DTG dispute the construction of eight claim terms.[1]

- "the removable battery assembly being in the discharge state whenever docked with the battery docking station" (claims 1-2)
- "discharging a battery of the removable battery assembly whenever the removable battery assembly is docked with the battery docking station and the power is on" (claims 12-14)
- "discharging a battery of the substitute battery assembly whenever the substitute battery assembly is docked with the battery docking station and the power is on" (claims 12-14)
- "discharging a third battery whenever neither of the removable battery assembly nor the substitute battery assembly is docked with the battery docking station and the power system is on" (claims 12-14)
- "holster" (claims 1-2, 12-14)
- "opposite blind end" (claims 1-2)
- "guide" (claims 1-2, 12-14)
- "extending from the open end to the blind end" (claims 1-2)

[1] The parties agree that "open end" is "an end of a holster, opposite a blind end of the holster, for receiving a battery assembly," and that "housing" is "an exterior structure of a battery assembly." Joint Statement, Dkt # 43 at 2.

DISCUSSION

Claim construction is a matter of law. *See Markman*, 517 U.S. at 388-389. Claim terms are generally given the ordinary and customary meaning that would be ascribed by a person of ordinary skill in the art in question at the time of the invention.[2] *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-1313 (Fed. Cir. 2005) (en banc). In ascertaining how a person of ordinary skill in the art would have understood the claim terms, the court looks to the specification of the patent, its prosecution history, and, where appropriate, extrinsic evidence such as dictionaries, treatises, or expert testimony. *Id.* at 1315-1317. Ultimately, "[t]he 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." *Id.* at 1316 (citation omitted).

> "*the removable battery assembly being in the discharge state whenever docked with the battery docking station*"

Claim 1 discloses that a "removable battery assembly includes a charge state and a discharge state." The specification does not define either term.

[2] Neither party in its briefing sketches a profile of a person of ordinary skill in the art. At the claim construction hearing, counsel for Enovate suggested that such a person would have earned a bachelor's degree in either mechanical or electrical engineering.

Intuitively, and the parties do not disagree, the charge state includes when the battery is charging, while the discharge state includes when the battery is discharging. The dispute centers on whether the discharge state can also include when the battery is charging and when the battery is not actively discharging.[3]

Citing to the specification, Enovate submits that a battery is in the discharge state when it is "capable of being in the discharge state."

> When using workstation 12a, 12b of system 10, a battery docked with the corresponding docking station 32 may be swapped with a substitute battery once discharged. . . . Once removable batteries coupled with workstations 12a, 12b are discharged, or are nearly discharged, workstations 12a and 12b may be taken to a given location where substitute batteries are available, and the substitute batteries swapped with the discharged batteries coupled with each workstation 12a, 12b. By using a back-up battery 106 with each workstation 12a, 12b, operation of system 10 may be essentially seamless, and substitute batteries swapped with discharged batteries, without requiring workstations 12a, 12b to power down, as further described herein. This *capability* is contemplated to provide substantial advantages over earlier strategies where workstations were plugged into a wall outlet for

[3] With respect to this and the three "discharging" terms, the parties also each offer a substitute phrase for "whenever" – "when" in Enovate's case, and "at any time or every time" in DTG's case. There is no suggestion that "whenever" is used in the claims in any other than its common English sense. As such, no further construction is necessary. *See Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015) ("'Being provided to' is comprised of commonly used terms; each is used in common parlance and has no special meaning in the art. Because the plain and ordinary meaning of the disputed claim language is clear, the district court did not err by declining to construe the claim term.").

> recharging or where workstations had to be powered down to change batteries.

'607 patent, col. 4, l. 51 - col. 5, l. 3 (emphasis added). Enovate misreads this discussion: the touted capability – that discharged batteries may be swapped with substitute batteries without interrupting the use of the workstation by shutting it down or plugging the workstation into a wall outlet – is explained by the coupling of an onboard back-up battery with a removable battery assembly. Enovate's proposed construction, defining the discharge state as a capability to be in the discharge state, is also unhelpfully circular and overly expansive – as DTG notes, the capability to discharge is, in essence, what a battery is all about.

DTG, for its part, contends that a battery in the discharge state "is discharged and is not being charged (or otherwise receiving power)." The court agrees that in the discharge state, a battery is not charging. As a matter of ordinary meaning, charging and discharging a battery refer to diametric processes of providing and relieving a battery of its electrical charge. *See McGraw-Hill Dictionary of Scientific and Technical Terms* (6th ed. 2003) (defining "charge" as "[t]o feed electrical energy to a capacitor or other device that can store it," and "discharge" as "[t]o remove a charge from a battery, capacitor, or other electric-energy storage device"). Nothing in the patent

suggests that the patentee intended to blur or eliminate this commonly understood distinction in claiming a "charge state" and a "discharge state."

Further, as noted *supra*, a vaunted advantage over prior art is that the patented workstation does not plug into a wall outlet to recharge its main battery, thus eliminating "downtime and inconvenience." '607 patent, col. 2, ll. 3-6. During the prosecution of the '607 patent, the patentee relied on this innovation to overcome the examiner's obviousness rejection in view of a Clark patent and other prior art.

> [T]he claims to a mobile workstation were never intended to be read upon a conventional wall-charged workstation such as that taught by Clark. . . . Clark's battery does not appear to ever be decoupled from the workstation, and by definition use of the workstation while recharging would be impossible or at least severely inconvenienced. As explained in Applicants' Specification, the presently claimed concepts contemplate uninterrupted use of a mobile workstation, where it is <u>never</u> necessary to idle the workstation for battery recharging.

DTG Ex. 9 (Patentee Office Action Response of January 6, 2010), Dkt # 36-1 at 53 (emphasis in original).

To limn this distinction, the patentee amended the then-pending claims to add elements including "a first battery," a "second battery" that is part of the removable battery assembly, and that "wherein the removable battery assembly includes a charge state and a discharge state, the removable battery assembly being in the discharge state whenever docked with the

battery docking station." *Id.*, Dkt # 36-1 at 47. "The subject matter of the removable battery assembly having a charge state and a discharge state, and being in the discharge state whenever docked with the battery docking station, may be understood to mean that the removable battery assembly is not charged when mounted on the mobile workstation." *Id.*, Dkt # 36-1 at 54. The patentee went on to use these claim elements to distinguish Clark and other prior art.

> Clark explains at column 14, beginning on line 23, that the wireless computer terminal is powered from the AC wall outlet when the battery is being charged. The battery in Clark would thus be in a 'charge' state while mounted on the workstation, differing from the language of claim 1 stating that the battery assembly is in the discharge state whenever docked with the docking station.
>
> . . .
>
> Another way to understand the distinctions discussed above, is that in Applicant's system power may only flow in one direction between the removable battery assembly and the device powered thereby. Each of the references of record teaches both supplying power to a battery and receiving power from the battery while the battery is docked. There should be no dispute that a proper rejection under 35 USC § 103(a) requires that the cited references teach or suggest all of the subject matter of the claims. For reasons explained above, the proposed combination of Clark, Wung or Grabon does not teach or suggest all the subject matter of claim 1, and the rejections should be withdrawn.

Id. at 55. The examiner accepted patentee's arguments, and, on May 5, 2010, issued the Notice of Allowance.

Enovate, in response, asserts that nothing in the specification indicates that the charge and discharge states are "mutually exclusive." Enovate Reply at 6. Enovate also portrays its prosecution arguments as distinguishing certain prior art embodiments of mobile workstations with a fixed battery that may *only* be recharged when plugged into a wall outlet, and not as disavowing all systems that *could* recharge a battery from a wall outlet.[4] *See id*. at 8-9. This argument is unavailing in light of patentee's unequivocal statement that "in Applicant's system power may only flow in one direction between the removable battery assembly and the device powered thereby." Because power can only flow from the removable battery assembly to the mobile workstation, the removable battery assembly may never receive power and charge when docked on the workstation.[5]

The court rejects, however, the portion of DTG's proposed construction that requires active discharging in the discharge state. The relevant portion of the prosecution history describes the discharge state as the absence of

[4] At the claim construction hearing, counsel for Enovate appeared to retract this contention, stating that "I don't believe we are arguing that the battery would be – that our proposed construction would lead to a conclusion that the battery could be charged when it is in the discharge state."

[5] N.B., the directional restriction of power flow discussed in the prosecution history does not apply to the "first battery" element, which is not claimed as a part of the removable battery assembly.

charging, and does not require active discharging. The claims of the patent also observe this distinction. Claim 12 recites "discharging a battery of the removable battery assembly whenever the removable battery assembly is docked with the battery docking station *and the power system is on*." (emphasis added, "and the power system is on" is a limitation in all three of the "discharging" terms). Claim 1, directed to the "discharge state," is not restricted to when the power system is on. *See* '607 patent, claim 1 ("where in the power system includes an on state and an off state"). Consequently, the court adapts the definition of "discharge state" disclosed in Enovate's prosecution history: "the removable battery assembly being in the discharge state whenever docked with the battery docking station" shall be construed as "the removable battery assembly is not charging whenever docked with the battery docking station."[6]

The "discharging" terms

Claim 12 recites three "discharging" terms. The first two require "discharging a battery of [the removable battery assembly/the substitute battery assembly] whenever [the removable battery assembly/the substitute

[6] The choice of the phrase "is not charging" in place of "is not charged" as used during prosecution avoids the ambiguity in English that "is not charged" could also mean "has not been charged," in addition to "is not in the process of being charged."

battery assembly] is docked with the docking station and the power system is on." The third requires "discharging a third battery whenever neither of the removable battery assembly nor the substitute battery assembly is docked with the battery docking station and the power system is on." DTG proposes to define each "discharging a [] battery []" phrase with "the [] battery [] is discharged and is not being charged (or otherwise receiving power)." Enovate's proffered constructions, on the other hand, maintain the claim language other than replacing "whenever" with "when."

The court agrees with DTG that when each of the three batteries is discharging, the battery is not simultaneously charging. The use of the present participle, as commonly understood, means that a battery is in the act of discharging. A battery is a "[d]irect-current voltage source." *McGraw-Hill Dictionary of Scientific and Technical Terms*. Direct current, in turn, is "[e]lectric current which flows in one direction only, as opposed to alternating current." *Id*. Thus, while direct current flows out of a battery as required by the three "discharging" terms, direct current cannot also flow in the opposite direction into the battery, as would be necessary for it to be

charging.[7,8] Consistent with this understanding, the court will construe the three "discharging terms" as follows:

- "discharging (and not charging) a battery of the removable battery assembly whenever the removable battery assembly is docked with the battery docking station and the power is on"

- "discharging (and not charging) a battery of the substitute battery assembly whenever the substitute battery assembly is docked with the battery docking station and the power is on"

- "discharging (and not charging) a third battery whenever neither of the removable battery assembly nor the substitute battery assembly is docked with the battery docking station and the power system is on"

"*holster*"

The term "holster" appears in all of the claims and is not explicitly defined in the patent. Claim 1 recites "the battery docking station further including a holster having an open end and an opposite blind end, and defining a guide extending from the open end to the blind end which includes a shape and an internal contour." Claim 12 recites "engaging the substitute battery assembly in a guide defined by a holster of the battery docking

[7] The removable and substitute battery assemblies do not charge because, as discussed *supra*, "power may only flow in one direction between the removable battery assembly and the device powered thereby."

[8] At the claim construction hearing, counsel for Enovate acknowledged that, at least with regard to the technology disclosed in the patent, a battery cannot simultaneously charge and discharge.

station." The parties agree that a holster is something configured to hold or receive a battery assembly, but disagree whether the term encompasses additional structure. According to Enovate, a holster is any "structure configured to hold a battery assembly." DTG maintains that a holster is necessarily "a case or compartment having enclosed sides."

DTG notes that the disclosed embodiment in the '607 patent (and Enovate's own product) reflect that a "holster" has enclosed sides, and that its proposed construction is consistent with dictionary definitions that define "holster" as "a leather or fabric case for carrying a firearm on the person (as on the hip or chest), on a saddle, or in a vehicle" or "a sheathlike carrying case for a firearm, attached to a belt, should sling, or saddle." DTG Br. at 8, citing *Merriam-Wester Online* and *Dictionary.com*. DTG also challenges Enovate's definition as overbroad because, "[f]or example, 'clamps,' 'hooks,' 'flanges,' and 'shelves' are all devices that could hold a battery assembly. However, these terms all refer to objects that would clearly not be 'holsters' under any reasonable interpretation of the term." DTG Reply at 1.

While the court agrees that not all structures that could hold a battery assembly constitute "holsters," DTG's reading is simultaneously too restrictive and too broad. Enclosed sides are not a necessary or inherent feature of a holster. As the Federal Circuit has cautioned, "we do not import

limitations from a preferred embodiment." *Seachange Int'l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1377 (Fed. Cir. 2005). In ordinary use, a holster can also refer to "[a] belt with loops or slots for carrying equipment, as small tools." *Webster's II New College Dictionary* (2001). A belt with loops, obviously, does not have enclosed sides. On the other hand, a large suitcase would satisfy DTG's definition of "a case or compartment having enclosed sides," but would not be described as a holster in common parlance.

The two common features of a holster – be it for guns or tools – are its close fit to its intended content, and that it attaches to its animate or inanimate host.[9] This is also consistent with the claims' requirement that the holster or the battery docking station (of which the holster is a part) is "mounted," '607 patent, claims 1, 6, & 7; and that the holster "defin[e] a guide" for the battery assembly, *id.* claims 1, 6, 7, 12, & 15. Consequently, the court will construe "holster" as an "attached close-fitting holder for a battery assembly."

"opposite blind end"

Claim 1 describes the battery holster as "having an open end and an opposite blind end." Enovate takes the position that the "opposite blind end"

[9] A standalone gun case or tool case, for example, would not qualify as a holster.

is the "end of holster opposite open end," while DTG defines it as "an end opposite the open end of the holster that is not visible when a battery assembly is positioned therein." While the court agrees with DTG that Enovate's definition reads out the "blind" limitation, nothing in the patent suggests that "blind" in the context of the battery holster relates to visibility. Rather, because "blind end" is recited in direct juxtaposition to the "open end" through which the battery passes into the holster, the most fitting understanding of "blind end" is "closed end" through which the battery does not pass. *See Merriam Webster's Collegiate Dictionary* (10th ed. 2000) (a definition of "blind" is "having but one opening or outlet"); *Webster's II New College Dictionary* ("blind" meaning "closed at one end" or "having no opening"). Thus, "opposite blind end" shall be construed as "closed end opposite the open end."[10]

"*guide*"

DTG contends that the term "guide" is indefinite because it is variously characterized in the '607 patent as a key, having a narrowing taper, or being defined by an inner diameter having a non-polygonal shape. "[A] patent is

[10] At the claim construction hearing, counsel for Enovate offered the alternative construction that "blind end" just refers to the "bottom" of the holster. This is not inconsistent with the court's construction.

invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). While the specification may describe certain embodiments of a guide inartfully, here, the meaning and function of the term as claimed is not disputed.[11] As its alternative position, DTG aptly defines "guide" as a "feature of a holster that guides the battery assembly during insertion or removal." This is consistent with the common understanding that a guide can be "a device for steadying or directing the motion of something," *Merriam Webster's Collegiate Dictionary*, and the disclosed function that the guide engages the battery assembly and ensures its proper positioning in the holster to make contact with electrical connectors. *See* '607 patent claim 1 ("the removable battery assembly being configured to dock with the battery docking station via engagement in the guide, and including a housing having a shape which is complementary to the shape of the guide and an external contour configured to mate with the internal contour of the guide"); *id.* col. 11, ll. 38-45 ("battery input interface 33 may be located at blind end 102, and

[11] Based on the additional descriptions in the patent, counsel for DTG reasonably recognized that the term "diameter" was likely mistakenly substituted for the intended term "perimeter."

may include an electrical connector 98 which is configured to electrically connect with electrical connector 82 of battery assembly 16 such that an electrical power link . . . may be established between battery assembly 16 and power system 28 upon docking of battery assembly 16 in docking station 32"). The court will therefore construe "guide" as "a feature on the holster to position the battery assembly during insertion, removal, or use of the battery assembly."

"extending from the open end to the blind end"

Enovate submits that the plain meaning of "extending from the open end to the blind end" is "between the open end and the blind end." The court agrees with DTG that Enovate's proposal reads out the "extending" limitation, as something that is less than the full length between the ends may be "between" the ends, but does not "extend" from one end to the other. "Extend" in this context is commonly understood to mean "[t]o stretch or spread out to full length." *Webster's II New College Dictionary*. The court will therefore adopt DTG's construction – "existing fully from the open end to the blind end."

ORDER

The claim terms at issue will be construed for the jury and for all other purposes in the pending litigation in a manner consistent with the above rulings of the court.

SO ORDERED.

/s/ Richard G. Stearns
UNITED STATES DISTRICT JUDGE