

United States District Court,  
S.D. New York.

**AQUA PRODUCTS, INC,**  
Plaintiff.

v.

**INTEX RECREATION CORP,**  
Defendant.

No. 06 CV 1746(LAP)

**June 5, 2007.**

### ***MEMORANDUM AND ORDER***

**LORETTA A. PRESKA, United States District Judge.**

Aqua Products ("Aqua"), the plaintiff in the above action, is the assignee of U.S. Pat. No. 6,412,133 ("the '133 patent"), which teaches an automated pool cleaner steered by the directional discharge of water jets. Aqua filed suit against Intex Recreation Corporation ("Intex") for infringement of claims 1-3, 21, and 30-31 of the '133 patent by the manufacture and sale of Intex's pool cleaning apparatus (the "Auto Cleaner") in the United States. On February 23, 2007, this Court held a *Markman* hearing for the purpose of construing the disputed claim terms.

#### ***Facts***

The application for the '33 patent was filed on January 25, 1999. The Patent and Trademark Office ("PTO") examiner first responded to the application on August 4, 2000, by filing a election/restriction requirement under 35 U.S.C. s. 121, noting that some of the claims were directed to an apparatus for cleaning a pool, while other claims of the application were directed to an improved method of propelling the apparatus. (Crisona Decl. Ex. 2, August. 4, 2000, PTO Office Action.) FN1 Aqua filed an amendment in response to the restriction requirement on October 4, 2000, electing the apparatus claims, traversing the restriction requirement, and canceling the non-elected claims. (Crisona Decl. Ex. 3, Oct. 4, 2000, Response to PTO Office Action.) On December 19, 2000, the examiner issued another restriction requirement after identifying further patentably distinct species in the application. (Crisona Decl. Ex. 4, December 19, 2000, PTO Office Action.) In the December 19 Office Action, the examiner required an election to either the "self-propelled" apparatus of Claims 1-29 or the method of propelling the pool cleaning apparatus in Claims 30-34, 36, and 38. (*Id.*) On page 4 of the Office Action the examiner stated that the embodiment of Figures 12 and 12a could not be grouped with the other figures, because Figures 12 and 12a used an external pump rather than an internal pump, which was patentably distinct. (*Id.* at 4.)

FN1. "Crisona Decl." refers to the Declaration of Richard Crisona dated January 24, 2007.

On February 20, 2001, Aqua again traversed the restriction requirement and elected to prosecute the claims directed toward the apparatus. (Crisona Decl. Ex. 5, February 20, 2001 Response to PTO Office Action.) It cancelled the non-elected species and also remarked that it disagreed with the examiner's comment that no claim was generic and "respectfully submit[ted] that claim is [sic] generic". ( *Id.*) Aqua did not specify the number of the claim it considered generic. ( *Id.*)

On April 25, 2001, the examiner allowed Claims 1-20 of the application and withdrew Claims 21-29 from consideration as being drawn to a nonelected species. (Crisona Decl. Ex. 8, April 25, 2001, PTO Office Action.) The examiner also noted that although Aqua had asserted that a claim in the application was generic in its February 21 Reply, it had failed to specify which claim was generic. ( *Id.*) Soon afterwards, the examiner issued a Notice of Allowability for Claims 1-29 of the application. (Crisona Decl. Ex.9, PTO Notice of Allowance.) No explanation was given for the examiner's allowance of Claims 21-29. ( *Id.*)

After the Notice of Allowance from the PTO, but before the patent was issued, Aqua became aware of additional prior art pertinent to its invention. (Crisona Decl. Ex. 10.) Aqua filed Information Disclosure Statements for the prior art and also filed a Request for Continued Examination and Amendment. ( *Id.*) In the amendment, Aqua inserted the additional limitation that after leaving the "pump discharge outlet" the volumetric flow of water would make only one major, i.e., right-angle, change o (pound sterling) direction. ( *Id.* at 2.) Aqua noted that its amendment was to minimize pressure losses due to turbulence and directional chances of the water stream prior to discharge from the apparatus. ( *Id.* at 3.) The patent issued on July 2, 2002.

### *Legal Standard*

The first step of any patent infringement analysis is to construe the claims of the patent-in-suit. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 384 (1996). Claim construction is a matter of law for the court to decide. *Id.* at 373. The claims of the patent define the invention to which the patentee is entitled. *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed.Cir.2005). By marking the limits of the invention, the claims also serve to inform the public what subject matter remains open. *Markman*, 517 U.S. at 373.

The Federal Circuit described the proper method of claim construction in *Phillips*. A court should construe a patent as it would be read by a person having ordinary skill in the art at the time of the invention. *Id.* at 1313. The primary sources for determining the proper construction of the claims are the intrinsic sources: the claim language, the specification, and the prosecution history if in evidence. *Id.*

The starting point for claim construction is the ordinary and customary meaning of the terms of the claims. *Id.* The claim terms should not be read in a vacuum but must be read in light of the specification, which the Federal Circuit has made clear is the "single best guide to the meaning of a disputed term." *Id.* at 1315 (quoting *Vitronics Corp. v. Conceptronics, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996)). In addition to providing a general context for claim construction, the specification may be used by the patentee to define one or more terms in a manner different from the terms' ordinary and customary meaning, thereby permitting the patentee to act as its own lexicographer. *Vitronics*, 90 F.3d at 1582. In such a case, the patentee's definition of the term controls the claim construction over any general meaning for a term. *Id.* While a patentee must "clearly" define a term if the patentee chooses to act as its own lexicographer, it need not "explicitly" define the term. *See id.* at 1582 (stating that the "specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication").

A patentee may also relinquish certain possible constructions of a claim during prosecution of the patent. *Id.* at 1317. If examination of the claims and specification of the patent itself leaves the claim terms ambiguous, the prosecution history may help to clarify them. *Id.* Communication with the examiner may explicitly define claim terms. *Id.* In addition, if the patentee narrows its claims in response to an examiner's rejection, the patentee thereby surrenders possible claim constructions. *Id.* However, because the prosecution history shows the negotiation between the PTO and the applicant, rather than the final product, it is not as reliable as the claims and the specification. *Id.* at 1317.

In addition to the material contained within the patent, extrinsic evidence may be used; however, it should not control the construction of the claims over the intrinsic sources. The Federal Circuit made clear in *Phillips* that extrinsic evidence should be used only if all the intrinsic evidence (claims, specification, and prosecution history) is insufficient to construe the claim terms. *Id.* at 1318. In addition, extrinsic evidence must still be considered in the context of the intrinsic evidence. *Id.*

A patentee may choose to word its claims in "means-plus-function" form under the authority of 35 U.S.C. s. 112, paragraph 6. The court must first determine the function being carried out and then determine what structures or "means" disclosed in the specification are applicable to those functions. *JVW Enters. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1330 (Fed.Cir.2005). Only the means disclosed in the specification of the patent, and equivalents thereof, may properly be considered within the scope of the means-plus-function claim. *Id.*

### *Discussion*

The '133 patent teaches an automated pool cleaner apparatus. Claim 1 is the only independent claim asserted in the present action. Claim 1 recites:

1. A self-propelled cleaning apparatus for cleaning the submerged bottom surface of a pool or tank, said apparatus being propelled by the discharge of a water jet, the apparatus comprising:

a water pump with a pump discharge outlet for emitting a pressurized stream of water, the axis of the pressurized stream discharged from the pump discharge outlet being generally normal to the surface of the pool or tank;

a directional discharge conduit in fluid communication with the pump discharge outlet, the discharge conduit having at least one discharge opening through which the water jet is directionally discharged from the apparatus, the axis of the portion of the discharge conduit proximate the at least one conduit discharge opening being generally normal to the axis of the pressurized stream exiting the pump discharge outlet; and

a water jet valve located between the pump discharge outlet and the at least one discharge opening in the discharge conduit, the water jet valve being operable between first and second discharge positions to direct the water jet in generally opposite directions,

whereby the pressurized water stream discharged from the pump discharge outlet undergoes only one right-angle change of direction before being discharged from the apparatus to move over the bottom surface of the pool in a direction that is determined by the position of the water jet valve.

'133 patent, col. 23, lines 66-67; col. 24 lines. 1-26.

## 1. "*Water pump*"

Intex contends that Aqua surrendered its right to claim external pumps during prosecution of the '133 patent. Intex states that because the examiner did not recognize any claims in the application that would mature into the '133 patent as generic, and because Aqua allowed the patent to issue without the PTO declaring that it contained a generic claim; that Aqua "unambiguously elected cleaners with internal pumps."

Aqua's position is that although the examiner never acknowledged Claim 1 to be generic, nothing in the language of the claim limits its scope to solely internal water pumps, and thus the Court should find that the patent covers both internal and external water pumps. Aqua cites *Insight Technology, Inc. v. Surefire LLC*, Nos. 04-074, 03-253, 2006 WL 519672 at (D.N.H. Feb. 28, 2006), as support for its argument that the Court may find a claim to be generic, regardless of the actions of the PTO during prosecution. Additionally, both parties agreed at the *Markman* hearing that the findings of the examiner, while persuasive authority, are not binding on this Court. (Tr. at 40; Tr. at 56.) FN2

FN2. "Tr." refers to the Transcript from the Markman hearing held on February 23, 2007.

Intex has given no reason to construe the term "water pump" in a manner different from its customary and ordinary meaning. Because there is nothing in the language of the claim or specification to limit the term "water pump" to only internal pumps, the term shall be construed to cover both internal and external water pumps.

## 2. "*Pump Discharge Outlet*"

The parties also disagree on the correct construction of the term, "pump discharge outlet." Aqua seeks to have the claim construed as being "the point at which the pressurized water stream enters the housing for the remainder of the apparatus." (Pl. Claim Const. Stmt. at 19.) FN3 It states that its construction is given support by the amendments it submitted after its Request for Continued Examination in response to the prior art it found after the Notice of Allowability, in which it stated that the volumetric flow of water made only one turn after exiting the pump discharge outlet. (Pl. Claim Const. Stmt. at 18.) Aqua reasons that the amendment would be nonsensical if the term "pump discharge outlet" were construed in a way other than its preferred construction. While Aqua's statements in prosecuting the amendment support its contention that it did not *intentionally* surrender external pumps, they do not support its argument that this Court should construe the claims to cover external pumps.

FN3. "Pl. Claim Const. Stmt." refers to Plaintiff Aqua's Opening Claim Construction Brief, filed January 24, 2007.

In contrast, Intex seeks to have the claim term "pump discharge outlet" construed "in accordance with its ordinary meaning." (Def't. Claim Const. Stmt. at 14.) FN4 Using a dictionary, Intex defines each word in the term and arrives at the conclusion that the only possible construction of the term is that the discharge outlet is the point at which the water exits the pump. (*Id.*) This use of extrinsic evidence is acceptable here, as there is no use of the term "pump discharge outlet" anywhere in the patent specification or prosecution history. Intex contends that Aqua's construction argument contravenes the plain meaning of the words in the

claim, thus violating the precept laid down in *Phillips* that without support from the specification the claim construction must be tethered to the claim language.

FN4. "Def't. Claim Const. Stmt." refers to Defendant Intex's Claim Construction Brief, filed January 24, 2007.

Intex also argues that Aqua's proposed construction conflicts with Figure 12, which demonstrates more than one right angle turn even using Aqua's construction. Figure 12, while illustrative of one possible embodiment of the invention, does not limit the entire scope of the patent's claims. The claims should not be confined by the embodiments disclosed in the specification. *Phillips*, 415 F.3d at 1323.

Intex's construction is correct. Aqua has presented no reason to go beyond the ordinary and customary meaning of the words in the term "pump discharge outlet." Because Aqua never defined the term "pump discharge outlet" either explicitly or implicitly in the specification, Aqua did not act as its own lexicographer in prosecuting the patent. Intex also correctly notes that in the case of an external pump, the Patent Office considered the pump discharge outlet an integral part of the pump apparatus, rather than inside the cleaning apparatus, because it described the external pump as being connected to a "housing adapter" rather than a "pump discharge outlet" in its December 19 Office Action. (Crisona Decl. Ex. 4 at 4.) A person of ordinary skill in the art of reading the '133 patent could not conclude that the PTO had considered the '133 patent to include external pumps, and while the PTO's understanding of the '133 patent is not binding upon this Court, it is nonetheless persuasive. Aqua's proposed construction is so far divorced from the meaning of the terms of the claim that without support from the specification it cannot stand, while Intex's construction simply applies the meaning of the words in the term as they would be understood by one skilled in the art. Both the prosecution history and the language of the claim point to the conclusion that the term "pump discharge outlet" should be construed to mean "the point at which water exits the pump."

### **3. "Discharge Conduit"**

The term "discharge conduit" appears in Claim 2. Claim 2 recites:

2. The apparatus of claim 1 in which the discharge conduit has at least two longitudinal discharge openings, each of which discharge openings is located at opposite ends of the discharge conduit and which create a longitudinal force vector in the water jet discharged from said openings.

'133 patent, col. 24, lines 27-31. Intex conceded that it agreed with Aqua's construction of the term "discharge conduit" except insofar as it relied on Aqua's proposed construction of the term "pump discharge outlet." (Tr. at 52.) Because "pump discharge outlet" has been construed as "the point where water exits the pump" there is no dispute between the parties with respect to "discharge conduit." Accordingly, the term will be construed to mean "the conduit through which water is discharged from the cleaner."

### **4. "Water Jet Valve"**

The term "water jet valve" appears in Claim 3, which recites:

3. The apparatus of claim 2 in which the water jet valve comprises at least one deflector member moveable between a first operating position and a second operating position, whereby movement of the deflector member from the first position to the second position effects the movement of water from one to the other

of the at least two discharge openings.

'133 patent, col. 24, lines 32-38. The parties agreed in pre-hearing briefing that "water jet valve" and "valve" should be construed to refer to "a device for regulating the flow of the water jet in the robotic pool cleaner apparatus." ( *See* Pl. Claim. Const. Stmt. at 20; Deft's Claim Const. Reply at 9.) FN5

FN5. "Deft's Claim Const. Reply" refers to Defendant Intex's Claim Construction Reply Brief, filed February 7, 2007.

### **5. "Directional Control Means"**

The parties agree that Claim 21, which is written in means-plus-function language, falls under the authority of 35 U.S.C. s. 112, paragraph 6. Claim 21 recites:

21. The apparatus of claim 3 in which the direction of discharge of the water is changed by directional control means that are responsive to the proximity of the apparatus to a side wall of the pool being cleaned.

'133 patent, col. 25, lines 33-41. Both parties also agree that the function recited in the claim is to change the direction of the water discharged from the pool cleaner apparatus. However, they disagree on the corresponding structures disclosed by the specification to perform that function.

Intex stipulated that the structure disclosed as follows meets the requirements of 35 U.S.C. s. 112, paragraph 6:

In another preferred embodiment of the invention, the flap 46 is moved by positive mechanical means in response to a contact with a side wall or other structure in the pool. For example, FIG. 1A illustrate a cleaner 10, similar in construction to that of FIG. 1, on which is mounted valved assembly 40'. Valve actuating member 240, is slidably mounted internally and parallel to the axis of the discharge conduits 44 in spiders 250 and passes through a slotted opening 248 in flap member 46'. Contact members 244 and 246 are mounted on rod member 240 on either side of flap member 46' and positioned to urge the valve into one or the other of its sealing positions to divert the water flow W. In operation, as the cleaner 10 approaches the sidewall, resilient tip member 242 contacts the wall and rod 240 is moved to the left in FIG. 1A until contact member 244 reaches flap 46' and moves it to the right. When lefthand wheel 30 reaches the wall, the movement of rod 240 ceases and flap 46' is seated. With water W exiting discharge conduit 44L, the cleaner moves away from, the wall with actuating rod 240 extending beyond the periphery of the cleaner and positioned to contact the opposite wall. Where [sic] the process is repeated.

'133 patent, col. 10, lines 9-31. Intex contends that this part of the specification is the only part that discloses a structure definite enough to serve as the "means" in the means-plusfunction claim.

Aqua argues that in addition to col. 10, lines 9-31, the following part of the specification also discloses a structure applicable to the claim:

In one preferred embodiment, a diverter or deflector means, such as a flap valve assembly, is interposed between the pump outlet and the discharge conduit, which diverter means controls the direction of movement of the water through one or the other of the opposing ends of the discharge conduit. The

positioning of the diverter means, and therefore the direction of travel of the cleaner, can be changed when the unit reaches a sidewall of the pool or after the cleaner has ascended a vertical sidewall. The movement of the diverter means can be in response to application of a mechanical force, such as a lever or slide bar that, is caused to move when, it contacts a vertical wall, and through a directly applied force or by way of a linkage repositioned the diverter means and changes the direction of the discharged water jet to propel the cleaner away from the wall

'133 patent, col. 4, lines 22-27. Intex disagrees, claiming that the above-cited passage is too vague to supply a structure within the meaning of the stature. At the *Markman* hearing, Intex's counsel conceded that its main point of contention was the use of the word "means" in the above-cited passage of col.4. (Tr. at 54). Accordingly, Aqua's proposed construction of the term "directional control means" will apply. The means-plus-function claim has a corresponding structure comprising:

rods slidably mounted and parallel to the axis of the discharge conduit, and contact members mounted on the rods positioned to urge the valve into a position to divert the flow of the water jet so that during operation when the robotic pool apparatus approaches the sidewall of the pool, the tip of the rod contacts the pool wall and is moved until it urges the valve into a position where the water jet is diverted to the conduit discharge outlet facing the pool wall, and the other rod is moved to a position extending beyond the periphery of the robotic pool apparatus.

### *Conclusion*

This claim-construction ruling will govern subsequent proceedings. The parties shall confer and inform the Court by letter how they propose to proceed.

SO ORDERED.

S.D.N.Y.,2007.

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