

United States District Court,  
N.D. Illinois, Eastern Division.

**MAYTAG CORPORATION,**  
Plaintiff.

v.

**WHIRLPOOL CORPORATION,**  
Defendant.

**April 27, 2000.**

Dishwasher manufacturer sued competitor for patent infringement, and competitor counterclaimed for infringement of its own patents. the District Court, Shadur, Senior District Judge, construed claims in competitor's patents.

Claims construed.

3,335,867, 4,319,599, 5,165,433, 5,803,100. Cited.

Mark T. Banner, Christopher J. Renk, J. Pieter van Es, Thomas K. Pratt, Banner & Witcoff, Ltd., Chicago, IL, for Plaintiff.

Kevin W. Guynn, Dennis A. Gross, Michael Leonard, Hill & Simpson, Chicago, IL, for Defendant.

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

**SHADUR, Senior District Judge.**

[1] This *Markman* ruling FN1 addresses the Counterclaim by Whirlpool Corporation ("Whirlpool") charging patent infringement by Maytag Corporation ("Maytag").FN2 That Counterclaim involves a variety of claim elements in United States Patents Nos. 5,165,433 and 5,803,100 . FN3 relating to dishwasher pump and soil separator systems.FN4 Before the claims can be construed, it is necessary (1) to review the relevant technology briefly, (2) to discuss one key principle of claim construction and (3) to dispose of a minor dispute between the parties.

FN1. Under *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 384, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996) this Court is required to construe the scope and meaning of a patent's claims as a matter of law before the factual application of those claims to the accused product.

FN2. This Court's March 14, 2000 (the "Opinion," 2000 WL 288101) has similarly construed relevant patent claims in Maytag's Complaint against Whirlpool.

FN3. This opinion will refer to the patents in suit as the "'433 Patent" and the "'100 Patent." As for the applicable statutory law, all citations to paragraphs of 35 U.S.C. s. 112 will simply take the form "Paragraph-." Maytag's and Whirlpool's initial memoranda will be cited as "M. Mem.-" and "W. Mem.-," with Whirlpool's reply referred to as "W. R. Mem.-." Citations to other submissions will also use the "M." and "W." designations.

FN4. Whirlpool earlier withdrew claims of infringement of its United States Patent No. 4,319,599 (the "'599 Patent").

### *Dishwasher Pump Technology*

On March 3, 2000 Whirlpool and Maytag put on highly informative graphic presentations for this Court's benefit on the technology involved in the '433 Patent and the '100 Patent. What follows is a somewhat simplified summary of what those presentations revealed. And of course no references here to what the successive patents have disclosed should be misinterpreted as expressing this Court's views as to whether those disclosures constituted patentable advances or as to whether, if so, Maytag has infringed them.

Dishwasher pump and soil separator systems dispense and recirculate hot and soapy water throughout the washing chamber while extracting soil that has been removed from the dirty dishware. Various methods have developed in the art for removing soil particles from the water.

One earlier Whirlpool patent (United States Patent No. 3,335,867) placed a "full flow filter" in the sump at the bottom of the wash chamber to prevent large soil particles from being recirculated in the wash. But that system was not effective for filtering out smaller particles. Then an improvement, as shown in the '599 Patent, attached a soil collector to the pump. That system moved water from the sump up into the pump and then used centrifugal force so that "soil particles are forced to the outer periphery of the pump chamber," where it was directed into the soil container by a guide chamber (W.Mem.5). Because the flow of water and soil into the soil container was relatively slow, particles were filtered by allowing them to settle on the bottom of the container. That system, however, still did not remove smaller particles that did not settle, and the slow rate of water limited the amount of water that was filtered.

Next a more effective means of soil collection was introduced by the '433 Patent: It, while similar to the '599 Patent, added a fine mesh filter to the top of the soil container to capture smaller particles. Water and soil thus flowed from the sump into the centrifugal pump chamber and into the soil container via the guide chamber. In the soil container, particles heavier than water settled on the bottom and lighter particles were captured by the filter at the top, leaving filtered water to flow back down into the sump. That design also allowed for eight times the water flow into the soil container than was allowed by the design disclosed by the '599 Patent.

Finally for present purposes, the '100 Patent disclosed a further modification that altered the shape of the soil container. To reduce the volume of water that the soil container held during the wash period, the soil container was made more shallow except for a "sump area" to collect the heavier particles.

## *Claim Construction*

[2] While this opinion will avoid useless repetition on the law as discussed in the Opinion, a brief discussion of one key topic is needed. Citing *Toro Co. v. White Consol. Indus.*, 199 F.3d 1295 (Fed.Cir.1999) and *Wang Labs. Inc. v. America Online, Inc.*, 197 F.3d 1377 (Fed.Cir.1999), M. Mem. 1 incorrectly urges that "as a matter of law, claims cannot be construed to be broader than what is contained in the specification." Though to be sure those cases are important recent developments in the *Markman* analysis, they do not paint with as broad a brush as Maytag would have this Court believe.FN5 Instead they stand for the quite different proposition that claim elements should not be broadened "beyond their meaning *in light of the specification*" ( *Toro*, 199 F.3d at 1302, emphasis added).FN6

FN5. Indeed, Maytag itself earlier took the less extreme (and more accurate) stance, at page 6 of its memorandum in connection with the *Markman* proceeding involving its claims against Whirlpool, that "[t]he general rule is that terms in a claim are to be given their ordinary meaning unless it appears that the inventor used them otherwise."

FN6. If claims were always defined solely by the specification, the limitations imposed by Paragraph 6 would be of general rather than specific applicability.

[3] It remains axiomatic that claim language can be broader in scope than any limitations set forth in the specification. Even more recently *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d at 1362 (Fed.Cir. 2000), quoting *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed.Cir.1994), noted "the danger of reading limitations into the claims from the preferred embodiments":

[A]lthough the specifications [sic] may well indicate that certain embodiments are preferred, particular embodiments appearing in a specification will not be read into the claims when the claim language is broader than such embodiments.

One key factor in the overall analysis is whether the dictionary definition of the claim language is "in sufficient detail to resolve close questions in particular contexts" ( *Toro*, 199 F.3d at 1300).FN7 Another highly relevant factor may be whether the specification offers only a single embodiment of the invention ( *id.* at 1301; *Wang*, 197 F.3d at 1383). But *Wang, id.* relatedly observes:

FN7. *Toro*, 199 F.3d at 1300 went beyond the claim language in part because "[t]he dictionary definitions of [the claim language] do[es] not shed dispositive light" on the meaning of the claim language in the context of the patent. See also *Anderson v. International Eng'g & Mfg., Inc.*, 160 F.3d 1345, 1348-49 (Fed.Cir.1998):

[D]ictionary definitions of ordinary words are rarely dispositive of their meaning in a technological context. A word describing patented technology takes its definition from the context in which it was used by the inventor.

Whether an invention is fairly claimed more broadly than the "preferred embodiment" in the specification is a question specific to the content of the specification, the context in which the embodiment is described, the

prosecution history, and if appropriate the prior art, for claims should be construed, when feasible, to sustain their validity.

### *Motion To Strike Expert Testimony*

Whirlpool cries "foul" at Maytag's inclusion in its briefing materials of an "Expert Report of Henry Stoll" (the "Stoll Report"). That report expresses Stoll's "opinions as to the teachings and claims of" the patents in suit (Stoll Report at 1). But while Maytag's brief is replete with references to the Stoll Report, this opinion has ignored those references as unnecessary to the construction of the relevant claims. Hence there is no need for any substantive discussion on the propriety of submitting the Stoll Report.

### *Disputed Claim Elements in the '433 Patent*

#### *"Second Wall" in Claim 1*

[4] Claim 1 includes this element (emphasis added to identify the terms disputed by the parties):

a *second wall* disposed *outwardly* of said first upstanding annular wall and defining therebetween a *guide chamber*.

That language must be read in light of the specification's representation (1) of the first wall as serving as both the outer wall of the pump chamber and the inner wall of the guide chamber and (2) of the second wall as the outer wall of the guide chamber and inner wall of the soil container. W. Mem. 13-14 asserts that because the specification uses the term "wall" in an array of ways, this Court should construe "second wall" broadly as "a structure for holding back pressure that may be of any shape, size, orientation or formed of any number of individual parts" ( *id.* at 14).FN8 But such wishful thinking runs contrary to the words of the claim because to form a guide chamber "therebetween," the outwardly disposed second wall must be "upstanding" FN9 and must surround the annular first wall.

FN8. W. Mem. 13 alternatively contends that a "'wall' is a structure that serves to hold back pressure" and that because that "meaning...is plain upon a simple reading of the claim...no further inquiry into the specification is necessary." But in the present context the term "wall" has no definitive content without reference to the specification.

FN9. That does not however mean that the second wall must be a straight vertical wall as viewed from the side. As the ensuing discussion highlights, it must simply be "upstanding" to the extent that its radially outward placement from the first wall forms a guide chamber "therebetween." As used in this opinion, "radially outward" connotes a structure on the same horizontal plane—that is, sharing space along a vertical axis—but farther away from the center of the pump chamber.

W.R. Mem. 11 (footnotes omitted) attempts to avoid such a construction:

[T]he inventor has testified that the '433 invention could readily be implemented using a non-annular guide chamber. One of the inventor's first prototypes... [used] a "hole" directly from the pump chamber to the soil container chamber. In the inventor's mind, the guide chamber of the '433 invention is merely a "conduit", "pipe" or "path."

Not only is that testimony unacceptable as extrinsic evidence, but it is also impermissible revisionist history that directly contravenes the words of the claim. Whirlpool drafted that claim language, and it is Whirlpool's fault if it did not properly reflect what was supposedly in the "inventor's mind."

As for the shape of that second wall, FN10 the specification embodies only an annular wall that encircles the first concededly annular wall. W. Mem. 15 nonetheless argues that the omission of the term "annular" in the claim language as to the second wall, while that term is expressly used as to the first wall, marks "a clear intent" to avoid that limitation. It is also true that construing the second wall in claim 1 as necessarily annular makes that claim nearly identical to claim 2 (W.Mem.15). FN11 Because that argument has some logical force (though any nonannular alternative would surely seem to be a less likely candidate), FN12 this Court holds that the second wall does not have to be "annular." Instead it may be square, or in the shape of a pentagon, or in any other shape that fulfills the in-all-events requirements that it must be upstanding and must completely surround the first upstanding annular wall.

FN10. "Shape" as used in this opinion refers to how the second wall appears from an overhead view.

FN11. Claim 2 states in relevant part: "said second wall comprises an annular wall disposed substantially circumjacent said first annular wall."

FN12. Given fluid dynamics and the forces of friction, it is obvious that the optimum shape for an upstanding wall that surrounds an upstanding annular wall to guide fluid therebetween is also annular.

In still another effort to reshape the English language, W. Mem. 14 would like to define "outwardly" as "away from a center point in any direction." To the contrary, M. Mem. 15 is right in saying that the term "outwardly" must mean, by definition, radially outward and sharing at least some position along a vertical axis." Hence the second wall is positioned circumjacent to the first annular wall. Buttressing that normal meaning of the claim language, the specification describes how centrifugal force is central to the design by forcing water over the first wall and into the guide chamber FN13-and to position the second wall in any direction other than radially outward would negate that effect. Moreover, the specification says "outwardly and upwardly" to describe the flow of wash liquid in the soil collection chamber (col.2, 1.38)-a usage that torpedoes Whirlpool's current suggestion that "up" is the *same* as "out."

FN13. Except where otherwise indicated, this opinion's column and line references are to the patent whose claims are being construed. Here col. 6, 1. 40 says that "the 'wash liquid [in the pump chamber] contains a heavy concentration of entrained soil particles...which tend to be forced outwardly by centrifugal force.' "

It is useful to sum up the end result of the analysis of ordinary English language usage-and not of Whirlpool's attempted convolutions-to this point. As used in claim 1, a "guide chamber" is a space formed between the second upstanding wall and the first annular upstanding wall that it surrounds, with that second wall being located radially outward from that first wall. FN14

FN14. Both parties agree that "guide chamber," as the term implies, is a compartmented space (see W. Mem. 14, M. Mem. 15).

To round out the analysis (perhaps a bad pun), this opinion should eliminate any potential misunderstanding of two other terms-"annular" and "subjacent" FN15-that are relevant to the claim element under consideration and that this opinion has already used, but without formal definition. W. Mem. 19-20 suggests that "annular" means "at least part of a circle, but not necessarily a full circle," and that "circumjacent" means "lying adjacent to at least a portion of an object, generally in a curved manner, but again, not restricted to a full 360 (deg.) surrounding." Again those purported definitions are seriously warped-not only are they contrary to the terms' dictionary meanings, but nothing in the '433 Patent suggests any usage different from those dictionary meanings.

FN15. Maytag and Whirlpool directly dispute the meaning of those terms in the context of claims 2 and 4 in the '433 Patent. Because this opinion addresses those terms at this point, no later discussion as to those other claim elements is needed.

[5] "Annular" means, in the words of the first listed definition in *Webster's Third New International Dictionary* (unabridged 1986)(" *Webster's*") "of or relating to a ring: forming a ring: shaped like a ring." FN16 To escape that really tautological usage, W. Mem. 19 points to a reference in the '599 Patent to the "annular flow" of water and to soil "flow that follows an approximately 270 (deg.) path within the soil container." But an "annular flow" merely describes the circular (ringlike) orientation of the liquid's flow. Although a patentee may choose to use the same word in different ways in different patents (part of the conventional wisdom that a patentee may be his or her own lexicographer), it is worth noting that the '100 Patent used the term "substantially annular" to describe a structure that was greater than 270 (deg.) in circumference but was not completely enclosed ('100 Patent, col. 6, 1.25)-something that surely renders it more likely that the closely related '433 Patent employs "annular" to mean a full 360 (deg.) ring.FN17

FN16. That is scarcely surprising, given the word's derivation from the Latin "annulus"-a ring.

FN17. And of course the specifications in both the '433 Patent and the '100 Patent use the term "annular" to describe a complete ring.

As for "circumjacent," Whirlpool offers nothing persuasive to suggest that the term is understood in the art as indicating a location in relation to only "at least a portion" of another object (W.R. Mem.17).FN18 Hence the term is given its ordinary *Webster's* listed meaning of "lying adjacent *on all sides*: surrounding" (emphasis added).FN19

FN18. W.R. Mem. 17 n. 22 cites a single patent "relating to a dishwasher construction" that uses "circumjacent" in a context where a structure does not completely surround another structure. Despite the already-referred-to notion that any patentee (in this instance, someone else) may serve as his or her own lexicographer, potentially giving a myriad of meanings to the same term in different patents, Whirlpool's *own* patent plainly uses the term in its ordinary sense to describe a structure that completely surrounds another.

FN19. Once again a language buff hardly requires schooling in classical Latin to couple "circum" with "jacent" (the latter as in "adjacent").

***"Second Wall...Including an Aperture" in Claim 1***

[6] Claim 1 also states that the second wall:

includ[es] an aperture permitting said soil-laden portion of the wash liquid to flow from said guide chamber.

M. Mem. 18 (emphasis in original) seeks a ruling that the quoted language "requires an aperture, or opening, *in* the second wall." Whirlpool does not debate that construction, which comports with the plain meaning of the claim language.

***"A Third Wall Defining" in Claim 1***

[7] Another element included in claim 1 is:

a third wall defining a soil container, said soil container being fluidly connected to said guide chamber by said aperture in said second wall.

Here M. Mem. 18 asks only that the "third wall" be construed as "a wall" and not as the "'cover' or top of the soil container." Because "wall" in the quoted context is not dispositively self-defining, it becomes appropriate to refer to the specification.

On that score Whirlpool says (W.Mem.16):

The specification identifies the soil container chamber 54 as being defined by the lower housing wall 49 (the bottom), the soil container wall 56 (one side), the second upstanding annular wall 50 (the opposite side) and the cover 30(top). All of these "walls" are joined together to receive and hold soil laden liquid from the pump chamber....

But that last use of "walls" to convert "the cover 30(top)" into the "third wall" is no better than a linguistic sleight of hand. It flies directly in the face of Whirlpool's own specification (col.4, 11.4-9)(emphasis added):

As shown in FIG. 2, the soil separator 20 further includes *an annular cover 30 which is disposed over and secured to soil container wall 56* by screws 31. When in place, cover 30 and soil container wall 56 combine to form a low-pressure water seal, preventing leakage of water therebetween.

And as will next be shown, it is likewise at war with the portion of Whirlpool's specification (col.5, 11.47-49) that the first sentence in its above-quoted Mem. 16 paraphrases:

Soil container chamber 54 is generally defined by lower housing wall 49, soil container wall 56, second upstanding annular wall 50 and cover 30.

To begin with a nonissue, the "first wall" referred to in claim 1 is indisputably separate from the "soil container chamber." Next, the claim, the specification language and the drawings all confirm that the "second wall" is what is uniformly identified by the number 50 (described at col. 4, 1. 20 as "upstanding

wall 50," and at col. 5, 11. 29-30 and 1. 33 and 11. 48-49, and col. 6, 11. 50-51 as "second upstanding annular wall 50"). Only one other "wall"-necessarily the "third wall"-is referred to, and that is "soil container wall 56."

All that being true, there is no way that Whirlpool can legitimately characterize "annular cover 30" as a "wall" (either as part of the third wall or otherwise). That cover is listed separately at col. 5, 1. 49 as one of the components that "generally define[ ]" the soil container chamber, and col. 4, 11. 5-6 describe that cover as "disposed over and secured to" the third wall-totally inconsistent with the contention that the cover can be *part of* the third wall.

In short, Maytag is right and Whirlpool is wrong. Because the '433 Patent' s specification expressly distinguishes between what it labels "walls" and the "cover" of the soil container, the third wall does not include the cover. All other terms in the claim element will be given their plain and ordinary meaning.

### **"Filter Means" in Claim 1 FN20**

FN20. Both parties agree that the discussion that follows in the text also covers two other claim elements:

1. Claim 10 in the '433 Patent (W. Mem. 20, M. Mem. 22 n. 13):

filter means in said soil container for filtering said soil-laden water of non-settling soil particles, maintaining said non-floating and non-settling particles with said soil container chamber, and emitting cleansed liquid.

2. Claim 16 in the '433 Patent (W. Mem. 23, M. Mem. 24 n. 15):

filter means disposed in said soil container for filtering non-settling soils from said soil laden portions, and providing a cleansed liquid.

[8] Next the parties dispute the meaning of this highlighted phrase in claim 1: FN21

FN21. M. Mem. 18 says that the cited language cannot mean " 'on' or 'next to' or 'above' the third wall," in response to the oblique statement at W. Mem. 17 that "the filter means forms a part of the third wall wherein the wash liquid can pass out of the soil container through the filter means."

filter means *disposed in said third wall* for filtering soil particles from said soil-laden portion of said wash liquid.

That language is in means-plus-function form FN22 and relates to this language in the specification (col.5, 11.58-60):

FN22. While the function of "filtering soil particles" is obvious, the only potential structure cited is the term "filter." That amorphously generic term is not sufficiently indicative of structure to avoid the application of Paragraph 6.

Fine mesh filter segments 32 in cover 30 permit flow of cleansed wash liquid to return to dishwasher space

14 for recirculation.

That last-quoted sentence identifies the "filter means" as the combination of the filter segments and the cover. Hence the "filter means" is "disposed in said third wall" by way of the filter-segments-plus-cover combination. Though it must be said that this reading involves an awkward and unusual use of the phraseology "disposed in" (something that would ordinarily be expected to refer to physical placement "in" or "within" the third wall), this Court cannot punish Whirlpool's patent writer for poor drafting by disregarding what is actually disclosed.FN23 Instead it reads the language (strained though this may seem) as calling for the filter means "disposed" (that is, positioned) in the third wall only in the sense that the cover is "disposed over and secured to" the third wall (col.4, 11.5-6) as discussed in the preceding section. Maytag loses this argument.

FN23. It is worth observing that claims 10 and 16 refer to placement of the filter means "in said soil container" (see n. 20)-a less problematic usage, given the fact (discussed in the prior section) that the cover *is* part of the structure that defines the soil container chamber (see col. 5, 11. 47-49, quoted earlier).

### ***"Means for Returning" in Claim 1*** FN24

FN24. Both sides agree that the following text discussion also covers two other elements (W. Mem. 23, M. Mem. 24 n. 15):

1. claim 10 in the '433 Patent:

means for returning the cleansed liquid to said pump chamber to be discharged with additional wash liquid delivered thereto.

2. claim 16 in the '433 Patent:

means for returning said cleansed liquid to said pump chamber to be discharged with additional wash liquid delivered thereto.

[9] It is also agreed by the parties that Paragraph 6 controls this language:

means for returning cleansed liquid to said pump chamber to be circulated with additional wash liquid delivered thereto when said circulation pump is operated in a wash mode.

But by its very terms the "means" referred to in this element pertains only to the function of "returning cleansed liquid to said pump chamber."

M. Mem. 19 seeks to limit all of the language in that claim element to what Maytag characterizes as its corresponding structure. But the authority cited by Maytag to support that notion, *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed.Cir.1999), actually cuts the other way by earlier reconfirming that Paragraph 6 is invoked when "[t]he term 'means' appears in a claim element *in association*

with a function...." ( id. at 1257, emphasis added). In this case the stated means and its related function are "means for returning cleansed liquid to said pump chamber." Though the words in the claim element do not stop there, the additional language is merely descriptive of what takes place after the cleansed liquid has left the "means" referred to in this claim element.

In that respect it is important to recognize the distinction between two types of liquid described in the specification: "cleansed" (that is, filtered) wash liquid and the generic term "wash liquid" that describes all liquid in the washer (contrast, e.g., col. 6, 1. 31 with col. 6, 1. 8). When the "cleansed liquid" later mixes with liquid that has fallen into the basin from the spraying of dishware ("additional wash liquid"), the claim language is careful to distinguish between the two.FN25

FN25. According to the specification, the "dishwasher functions as a continuous fluid circuit" during the wash mode (col.5, 11.66-67), so that "cleansed wash liquid...is returned to circulation ...to be continuously recirculated along with wash liquid..." (col.7, 11.9-12).

That distinction exposes the basic flaw in the M. Mem. 19 argument that coarse particle grate 21, soft soil chopper 70 and grate 83 are all corresponding structure. Those elements relate to straining, chopping and sizing particles from the *uncleansed liquid*. As W. Mem. 18 accurately points out:

[S]ince the cleansed liquid has just passed through a fine mesh filter, there are no large particles in the cleansed liquid which would require the additional function provided by the coarse particle grate, and hence the coarse particle grate is not necessary for the function of "returning cleansed liquid to the pump chamber." Also,...soft soil chopper 70 and grate 83 in the flow path of the returning cleansed liquid and recirculating wash liquid [are] associated with the function of chopping and sizing of particles to reduce the size of particles being admitted to the circulation pump,...a function separate and additional to the claimed function of "returning cleansed liquid to the pump chamber."

Significantly, no "means" is then referred to in any other element of claim 1 that carries out that "separate and additional" function.FN26 In short, that other function is simply not part of Whirlpool's claimed advance in the art. This Court therefore determines that the structure corresponding to the claim element now at issue comprises only floor 11, sealing ring 86, retainer ring 88, base plate 65 and lower housing wall 49.

FN26. Not only does W. Resp. 17 freely admit that claim 1 does not include the functions performed by coarse particle grate 21, soft soil chopper 70 and grate 83, but that admission also covers claims 10 and 16. And no other claim in the '433 Patent could even arguably encompass that structure.

### ***"Means For Draining" in Claim 1***

[10] Claim 1 also includes this element:

means for draining accumulated soil from said soil container means when said circulation pump is operated in a drain mode.

This element too is governed by Paragraph 6. As such, its corresponding structure described in the specification comprises drain port 58, ball check valve 60, drain impeller 76 and drain port 78.FN27

FN27. Whirlpool voices no quarrel with this Maytag reading in either of its memoranda.

**"Means...for Collecting" in Claim 10**

[11] One other element in claim 10 is:

means in said soil container for collecting non-floating soil material from said soil-laden portion of the wash liquid.

It is agreed that this is a means-plus-function element and that lower housing wall 49, soil container wall 56 and second upstanding annular wall 50 provide the structure corresponding to the stated function.

Where the parties part company is that W. Mem. 20 suggests that the "claim element should be interpreted as a lower wall portion of a soil container which will collect the soils, whether that wall portion is horizontal, vertical or angled therebetween." But that amounts to an inappropriate shift into the future inquiry whether a soil container wall *not* depicted in the specification (a non-angled wall) may be an "equivalent" structure. For now the specification, which shows soil container wall 56 as being angled, controls this claim construction phase.

**"Means Defining a Soil Container" in Claim 16**

[12] Despite its similarity to the just-discussed claim 10 element, the parties dispute whether Paragraph 6 applies to this claim 16 language:

means defining a soil container for collecting non-floating particles from the wash liquid to provide a cleansed liquid.

In an effort to overcome the presumption that the element is in means-plus-function form, W. Mem. 21 says:

The claimed function of..."collecting non-floating particles"....is performed entirely by the recited structure "soil container" since there is no aspect of the claimed function which is not accomplished by [that structure].

But while it is surely true that something like a "container" must collect those soil particles, that extraordinarily amorphous generic term scarcely defines a structure in the sense required to avoid the application of Paragraph 6. There is an almost infinite variety of types of containers, some obviously better than others at performing the claimed function. In fact, Whirlpool's own admission in connection with the just-discussed claim 10 element that "means *in* said soil container" (W. Mem. 20, emphasis added) "is properly interpreted under s. 112, para. 6" ( *id.*) strongly implies that "soil container" in the present claim calls for like treatment. So because the term "container" is too generic to escape the reach of Paragraph 6, the quoted element corresponds to the structure recited in the specification and its equivalents.FN28

FN28. As W. Mem. 21 says, that corresponding structure is "the soil container chamber 54 which is defined by lower housing wall 49, soil container wall 56, annular wall 50 and cover 30."

## **"Guide Means for Conducting...Wash Liquid" in Claim 16**

[13] One of claim 16's many elements is this:

guide means for conducting a portion of wash liquid containing said concentrated soil particles from said pump chamber to said soil container.

Despite Whirlpool's protestations at W. Mem. 22, the term "guide" cannot be viewed as sufficient structure (if it is indeed structure at all) to remove that language from the ambit of Paragraph 6.FN29 As *Laitram Corp. v. Rexnord Inc.*, 939 F.2d 1533, 1536 (Fed.Cir.1991) (emphasis in original) said of a similarly deficient description, "[t]he recited alleged structure tells only what the [claim element] *does*, not what it *is* structurally."

FN29. Nor does the phrase "from said pump chamber to said soil container" add enough to that de minimis description, by indicating the location of the means, to alter the analysis.

When the claim is read in terms of the specification as Paragraph 6 directs, it is clear that the corresponding structure comprises annular guide chamber 52, first and second upstanding annular walls 46 and 50, upper edge 47 of first wall 46 and aperture 51 (col.6, 11.45-51).FN30 That being so, only one other refinement needs to be looked at next: W. Mem. 23 (emphasis in original) asks that this Court "expressly find that the claimed functions does not require 'conducting a portion of wash liquid... *from the entire perimeter of the pump chamber.*' "

FN30. W. Mem. 22 admits that "guide chamber 52" is "the structure which performs this function" but suggests that it does not have to be annular because, though labeled as such, "there is nothing in the specification which requires such a geometry as necessary to perform the conducting function...." But Paragraph 6 does not ask a court to evaluate the structure in the specification and to determine, as an engineer might, the effectiveness of any particular configuration. It rather commands that the claim element be limited to the structure as described in the specification.

On that score the specification says (col.6, 11.45-50):

As the wash liquid swirls upwardly in a clockwise direction, the concentrated soil particles accumulated on the interior of first upstanding annular wall 46 flow over the upper edge 47 with a portion of the wash liquid. Wash liquid accumulates in annular guide chamber 52....

In light of that language and the depictions of the structure in the patent's Exhibits, Whirlpool has essentially invited this Court to repeal the laws of physics-principally but not solely the principle that water seeks its own level. Because upper edge 47 (like the first wall) is both annular by definition and in the same horizontal plane throughout, the flow over that edge is also 360 ~in scope.

## **"Means For Backflushing" in Claim 17**

[14] Here the parties agree that "means for backflushing said filter means" in claim 17 is governed by Paragraph 6. And this is the specification's description of the function and relevant structure (col. 3, 11.61-

68 and col. 4, 11. 1-3):

Each wash arm 25 includes...one downwardly directed spray nozzle 26 for providing a back-washing action, as will become apparent. Each downwardly directed spray nozzle 26 has a deflector tab 28 disposed immediately adjacent thereto, for providing a dispersed fan-shaped spray, as will be fully discussed hereafter. Liquid passageway 27 in central hub 23 permits pressurized wash liquid to flow to the lower wash arm assembly 22.

W. Mem. 23 argues that the described function relates solely to "downwardly directed spray nozzle 26," while M. Mem. 24 contends that it also includes "deflector tab 28, liquid passageway 27 and lower wash arm 22."

Claim 17 stops short of any reference to those last three components (which are instead picked up in claim 18, where the resulting fan-shaped spray is described as providing "improved backflushing of said filter means"). But the only way in which the specification describes the backflushing action as being provided at all is at col. 4, 11. 61-65, which (cross-referencing Figs. 6 and 7) treats deflector tab 28 and lower wash arm 22 as playing integral roles in that action. Hence this Court concurs in Maytag's reading of claim 17 to embrace those components.

That cannot be said of liquid passageway 27, which is simply one means of supplying water to the lower wash arm assembly. After all, the entire dishwasher functions as "a continuous fluid circuit," and the structure corresponding to the claim at issue certainly does not include all components that serve to circulate water to the lower wash arm.

To return to the deflector tab issue, this Court is unpersuaded by the W. Mem. 24 contention that "because of claim differentiation, the deflector tabs limitation of claim 19 cannot be read into...claim 17." As *IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1431 (2000) teaches, citing *Laitram*, 939 F.2d at 1538:

In any event, it is permissible for [two claims] to have similar scope after each is correctly construed in light of the structures disclosed in the written description, because the judicially-created doctrine of claim differentiation cannot override the statutory mandate of s. 112, para. 6. FN31

FN31. Whirlpool itself makes that very point immediately thereafter in the course of telescoping claims 17 and 18 (W. Mem. 23-24, also citing *Laitram*, 939 F.2d at 1538).

If claims 17 and 19 do effectively merge, it is because of the way in which Whirlpool itself has limited claim 17 in light of the specification.

### ***"Spray Nozzle for Directing" in Claim 18***

[15] Claim 18 includes, as part of the "backflushing means" that is "described in claim 17":

a wash arm device having a spray nozzle for directing a portion of said wash liquid to said filter means for clearing said filter means....

Both parties say that claim element 18 should be read in the same way that this Court has construed the

similar language in claim 17 (W.Mem.23, M.Mem.24). Although to be sure the quoted language expressly refers to the spray nozzle and not to the adjacent deflector tabs, claim 18's back reference to the claim 17 "backflushing means" encompasses those tabs too. So the parties are taken at their word: Claim 18 adds nothing to (and subtracts nothing from) claim 17.

### *Disputed Claim Elements in the '100 Patent*

As indicated at the outset, the '100 Patent assertedly represents an advancement over the '433 Patent: It lessens the volume of water held by the soil container by making it more shallow except for an "accumulator sump" at one end to collect the heavy soil particles. That aside, the '100 Patent at col. 3, 11. 1-3 states that "basic constructional features of the soil separator [from the '433 Patent are] incorporated by reference" into the later patent.

#### *"A Soil/Water Flow Channel" in Claim 4 FN32*

FN32. This text discussion also covers identical language from the '100 Patent's claim 8 (see W. Mem. 25, M. Mem. 29).

[16] W. Mem. 24 says that the following claim element "is understood from the plain meaning" of its words, while M. Mem. 25 asserts that the flow channel must be "annular":

a soil/water flow channel FN33 receiving water with entrained soil from adjacent said surrounding wall.

FN33. [Footnote by this Court] Although "soil/water flow channel" is used in the claims of the '100 Patent, while "guide chamber" was used in the '433 Patent, the '100 Patent's specification also uses the term "guide chamber."

If Whirlpool is right-if the claim language truly conveys a "plain meaning"-then the specification, which refers to "annular guide chamber 100," is not needed for guidance.FN34

FN34. As *Optical Disc Corp. v. Del Mar Avionics*, 208 F.3d 1324, 1334 (Fed.Cir. 2000) has recently reconfirmed:

Without evidence in the patent specification of an express intent to impart a novel meaning to a claim term, the term takes on its ordinary meaning.

"Soil/water flow channel" is not defined or even used in the specification. In an effort to support Whirlpool's contention that the phrase has a plain and ordinary meaning, W. Mem. 24 quotes a dictionary definition of "channel" as "a conduit, pipe, duct, gutter, groove or furrow." But that broad set of alternatives would not enlighten a person skilled in the relevant art. Rather such amorphous terms are not "plain" because they can mean whatever a patentee wants them to mean.

Because the claim language itself thus fails to give notice as to just what is claimed, the specification becomes relevant in the construction process. In that respect the primary referent for the term "soil/water flow channel" is "annular guide chamber 100" (col.4, 1.42). And even though the word "means" is absent

from this claim element, it is nonetheless in means-plus-function form (see discussion in *Micro Chem.*, 194 F.3d at 1257): In this instance "soil/water flow channel" is obviously the means, and its stated function is just as obviously framed as "receiving water with entrained soil from adjacent said surrounding wall." That being so, the exact (and only) structure adverted to in the specification limits the claim. In short, the "channel" in the '100 Patent, like the "guide chamber" in the '433 Patent, *is* annular.FN35

FN35. That is hardly surprising, given the earlier-mentioned fact that the basic structure of the '433 Patent is incorporated into the '100 Patent.

#### ***"A Soil Accumulator Sump Flow" in Claim 4*** FN36

FN36. It is also agreed that the ensuing text discussion also applies to this highly similar language from claim 8 (see W. Mem. 26, M. Mem. 29):  
a soil accumulator sump flow connected to said outlet end of said screening channel.

[17] Next in dispute is the meaning of the term "sump" in this claim 4 element:

a soil accumulator sump flow connected to a second end of said screening channel.

*Webster's* third-listed definition of "sump" is "a pit, depression, reservoir or tank serving as a drain or receptacle for liquids to be salvaged or further disposed of." Inserting that definition into the claim language results in "a pit, depression, reservoir or tank" to accumulate soil "connected to a second end of said screening channel."

While that basic construction is generally uncontroverted, FN37 M. Mem. 28 oddly suggests that, because Whirlpool's argument to the contrary "finds no support in the specification," the sump can be so small as to collect only a de minimis volume of soil-laden water. That suggestion is rejected, for it really tortures the claim language by effectively vitiating the sump's ability to accumulate soil.

FN37. M. Mem. 28 views the element as requiring "a recessed area in the screening channel that collects the soil," while W. Mem. 25 similarly says it requires "a depression in the floor of the screening channel through which the screening channel is drained." As the text discussion reflects, however, Maytag then quarrels with the further Whirlpool description that the sump "is sized large enough to permit a non-de minimis amount of soil-laden water to collect therein."

#### ***"Means for Draining Soil" in Claim 4***

[18] Claim 4 includes a "means for draining soil from said accumulator sump." With no structure being recited, that element is governed by Paragraph 6. From the specification the corresponding structure comprises pump motor 27, drain impeller 206, drain pump chamber 208, ball check valve 210, ball check valve support 211, conduit 220, soil container drain port 128 and drain port 216 (col.5, 11.66-67, col.6, 11.1-20).

#### ***Claims 8 and 11***

Two elements from claim 8 have already been construed in the context of like language in claim 4 (see nn. 32 and 36). Apart from those elements, M. Mem. 29 says this in general about claims 8 and 11:

The construction of the limitations of claim 8 is essentially the same as the construction of similar limitations in claim 4....Properly construed, claim 11, which depends from claim 8, is identical in scope to claim 8, notwithstanding the doctrine of claim differentiation.

Whirlpool interposes no quarrel with those statements-its R. Mem. is totally silent as to both assertions. This Court therefore accepts Maytag's position.

### *Conclusion*

This completes the construction of the debated claims in Whirlpool's patents as a matter of law. With this Court's earlier opinion having done the same as to Maytag's patents in issue, the case is ready for the second phase of a patent case: a jury determination on the issues of infringement and invalidity. This action is set for a status hearing at 9 a.m. May 5, 2000 to discuss the necessary procedures and timing to that end.

N.D.Ill., 2000.

Maytag Corp. v. Whirlpool Corp.

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