

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

**MAYTAG CORPORATION,**  
Plaintiff.

v.

**WHIRLPOOL CORPORATION,**  
Defendant.

**March 14, 2000.**

Owner of patent for dishwasher racking system sued competitor for infringement. Construing claims, the District Court, Shadur, Senior District Judge, held that: (1) structure for "means ... to define a protective barrier" was sufficiently described to avoid means-plus-function treatment; (2) "rack mounting means" was means-plus-function claim which covered only track and roller assembly described in specification and its equivalents; (3) "adjacent" portion of upper rack had to be near to, but did not have to abut, first side wall of lower rack; and (4) "front-to-rear gap" between shelf and sidewall referred only to orientation of gap, and imposed no particular length or width limitations.

Claims construed.

5,165,433, 5,205,419, 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.**

Maytag Corporation ("Maytag") brought this patent infringement action against Whirlpool Corporation ("Whirlpool"), alleging that Whirlpool infringed Maytag's United States Patent No. 5,205,419 . FN1 for a "Dishwasher Racking System." Whirlpool then counterclaimed, alleging that Maytag has infringed United States Patent Nos. 5,165,433 and 5,803,100, which relate to a dishwasher pump and soil separator system. FN2

FN1. In conformity with conventional practice, this opinion will refer to the patent in suit by its last three digits: " '419 Patent." As for the applicable (or potentially applicable) statute, all citations to paragraphs of 35 U.S.C. s. 112 will take the form "Section 112 para. -."

FN2. Of course, as is routine in patent cases, each side asserts the invalidity of the other party's patent or patents, alternatively denying infringement.

This opinion takes the first of the two steps required to determine whether claims of the '419 Patent have been infringed: conducting a *Markman* analysis ( *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), *aff'g* 52 F.3d 967 (Fed.Cir.1995) (en banc)) to construe the claims to determine their scope and meaning. To that end the parties have exchanged claim charts, and each side has submitted a full set of claim construction memoranda, FN3 enabling this Court to address each of the disputed claim elements as a matter of law. FN4 But first a brief review of claim construction principles will obviate the need for needless repetition in the discussion that follows. FN5

FN3. Maytag's initial memorandum and Whirlpool's response are respectively cited "M.Mem.-" and "W.Mem.-," and Maytag's reply is cited "M.R.Mem.-." Any citations to other submissions also use the "M." and "W." designations.

FN4. *Markman* calls for construction of the claims as a matter of law before the factual application of those claims to the accused products can take place.

FN5. For a more in-depth survey of both claim construction and means-plus-function principles, see this Court's opinion in *Nilssen v. Motorola, Inc.*, 80 F.Supp.2d 921 (N.D.Ill.2000).

### *Claim Interpretation*

[1] [2] Because a major purpose of patent law is to provide notice of what has been removed from the public domain for the life of the patent, the interpretive process is essentially limited to intrinsic evidence: the claim, the specification and the prosecution history (see, e.g., *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed.Cir.1999)). While "it is improper to rely on extrinsic evidence" such as expert testimony where no ambiguity exists or where such intrinsic evidence resolves any disputed ambiguity ( *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed.Cir.1996)), a judge "may also rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents" ( *id.* at 1584 n. 6). *Vitronics, id.* at 1582 also teaches that courts should construe claim language from the point of view of a person of ordinary skill in the field at the time of the invention.

[3] Moreover, as *Vitronics, id.* explains, the words of a claim should first be considered to assess the text's "ordinary and customary meaning." But a "patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is *clearly stated* in the patent specification or file history" ( *id.*) (emphasis added). FN6 In other words, "[t]he specification acts as a dictionary when it expressly defines terms or when it defines terms by implication" ( *id.*). FN7 Finally, because [t]he specification contains a written description of the invention which must be clear and complete enough to enable those of ordinary skill in the art to make and use it, ... the specification is highly relevant to the claim construction analysis ( *id.*).

FN6. According to Section 112 para. 1, "[t]he specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art ... to make and use the same." Section 112 para. 2 spells out the role of each claim: It "particularly points out and distinctly claims the subject matter which the applicant regards as his invention."

FN7. Conversely, when the claim language has a commonly understood meaning and the specification is not acting as a dictionary, the reader should go no further than the claim language. As *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 990 (Fed.Cir.1999) (citations omitted) puts it:

Our case law demonstrates two situations where a sufficient reason exists to require the entry of a definition of a claim term other than its ordinary and accustomed meaning. The first arises if the patentee has chosen to be his or her own lexicographer by clearly setting forth an explicit definition for a claim term. The second is where the term or terms chosen by the patentee so deprive the claim of clarity that there is no means by which the scope of the claim may be ascertained from the language used.

### *Means-Plus-Function Limitations*

[4] Another central issue as to a number of the claims is the extent to which they are governed by Section 112 para. 6:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

"Means-plus-function" claims thus define an invention's scope by function rather than by structure.

[5] *Al- Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1318 (Fed.Cir.1999) prescribes, for purposes of Section 112 para. 6 coverage or noncoverage, that "if the word 'means' appears in a claim element in combination with a function, it is presumed to be a means-plus-function element...." That presumption is overcome (1) if "a claim element that uses the word 'means' ... recites no function corresponding to the means" or (2) "if the claim element ... recites sufficient structure or material for performing [the claimed] function" (*Rodime PLC v. Seagate Technology, Inc.*, 174 F.3d 1294, 1302 (Fed.Cir.1999)). As the final variant, *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1257 (Fed.Cir.1999) (citations omitted) teaches that the presumption that a claim element without the word "means" falls outside of Section 112 para. 6 "can collapse" if the element "nonetheless relies on functional terms rather than structure or material to describe performance of the claimed function."

As those formulations suggest, a key factor in the analysis is the ascertainment of what structure is necessary to perform the function specified in the claim element under consideration. *Personalized Media Communications, LLC v. International Trade Comm'n*, 161 F.3d 696, 704 (Fed.Cir.1998) dictates that "[i]n deciding whether either presumption has been rebutted, the focus remains on whether the claim as properly construed recites sufficient definite structure to avoid the ambit of s. 112, para. 6."

For example, in dealing with a claim without the word "means," *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed.Cir.1996) determined that the claim language "detent mechanism defining the conjoint rotation of said shafts" did not trigger Section 112 para. 6. Though "detent" was functionally derived, *Greenberg*, 91 F.3d at 1583 (citations omitted) observed that the term:

denotes a type of device with a generally understood meaning in the mechanical arts, even though the definitions are expressed in functional terms. It is true that the term "detent" does not call to mind a single well-defined structure, but the same could be said of other commonplace structural terms such as "clamp" or "container."

When a claim element *does* use the term "means," the Section 112 para. 6's reference to whether it does so "without the recital of structure ... in support thereof" still calls for focusing on what structure is recited in the claim element. Thus *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1427-28 (Fed.Cir.1997) says that to rebut the presumption that Section 112 para. 6 applies, the claim must "go[ ] on to elaborate sufficient structure, material, or acts within the claim itself to perform entirely the recited function." FN8 For instance, *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 530-32 (Fed.Cir.1996) held that a claim element that began with "perforation means" FN9 fell outside of the coverage of Section 112 para. 6, in part because the element had "such a detailed recitation of its structure" (*id.* at 531).FN10

FN8. Although *Sage Products* addressed a claim element that included the word "means," the opinion's reference to what structure is needed to perform the recited function "entirely" is equally applicable to a claim element that does not employ the word "means" but is potentially in means-plus-function format despite the word's omission. Suppose for example that a claim element specifies three functions, while the only structure referred to there provides support for just two of the three functions. In that situation Section 112 para. 6 governs the claim element, irrespective of whether the word "means" does or does not appear in that element.

FN9. That disputed claim element, which related to disposable diapers that had perforated sides so that they could be torn and removed without pulling over the child's legs, read in full:  
perforation means extending from the leg band means to the waist band means through the outer impermeable layer means for tearing the outer impermeable layer means for removing the training brief in case of an accident by the user.

FN10. By contrast, *Laitram Corp. v. Rexnord, Inc.*, 939 F.2d 1533, 1536 (Fed.Cir.1991) (emphasis in original) construed a claim element incorporating the word "means" as coming within the scope of Section 112 para. 6 because the "recited structure tells only what the means[ ] *does*, not what it *is* structurally." Indeed, "[t]he recitation of some structure in a means plus function element does not preclude the applicability of section 112(6)" (*id.*).

Before this opinion turns from this statement of operative principles to their application, it should be emphasized that any disclaimers by this Court of the use of the specification to *narrow* a claim because that claim does not fit Section 112 para. 6 do not at all reflect a failure to *construe* the claim in light of the

specification. This Court is well aware of the teaching of the Federal Circuit in that respect, as most recently exemplified in *Toro Corp. v. White Consol. Indus., Inc.*, 199 F.3d 1295, 1299, 1301-02 (Fed.Cir.1999) and *Wang Labs., Inc. v. America Online, Inc.*, 197 F.3d 1377, 1383 (Fed.Cir.1999) FN11-and it has been faithful to that teaching in addressing the patent claims in the context of the patent documents as a whole.

FN11. *Toro* and *Wang* are listed in their order of decision, though they have been reported in F.3d in reverse chronological order. In any event, the *Toro* statement of the relevant principles is more extensive.

Enough, then, for the short course in basic principles. It is time to turn to the various patents and claim elements at issue, beginning with '419 Patent claim 1.

### ***Claim 1 of the '419 Patent***

At the outset, the litigants dispute the logical way to divide claim 1 for analytical purposes. Though the precise manner of division is not necessarily essential to effective claim construction as such, convenience of organization and discussion is well served by looking at the issues in terms of these five numbered elements:

A dishwasher having an enclosure defining a washing chamber and a dish racking system mounted therein, the combination comprising:

1. a lower rack having a bottom support means including a plurality of spaced-apart generally longitudinal and lateral wire members and
2. means extending generally perpendicular to said bottom support means for defining front, rear and a first and a second side wall, said first side wall extending substantially higher than said front, rear and second side walls to define a protective barrier between a side panel of said washing chamber and various oversize articles placed adjacent said first side wall for washing;
3. rack mounting means associated with opposed side panels of said washing chamber; and an upper rack supported above said lower rack by said rack mounting means,
4. said upper rack having bottom support means including a plurality of spaced-apart generally longitudinal and lateral wire members formed to provide at least one upwardly stepped portion adjacent said first side wall of said lower rack,
5. said upper rack wire members projecting upwardly and generally perpendicular to said bottom support means for at least partially defining front, rear and side walls.

Of these, elements 2, 3 and 4 are in dispute.FN12

FN12. Both sides concur that element 1 is *not* to be construed in means-plus-function form (see M.Mem. 10 and W.Mem. 2).

***Element 2 Is Not Governed by Section 112 para. 6***

[6] Element 2 is presumptively in means-plus-function form because it employs the word "means." But because lots of structure and little or no function is recited, the element does not come within the scope of Section 112 para. 6. While the first side wall (a structure) is said to act as a "protective barrier" for oversized articles (its stated function),FN13 the other walls are expressed in purely structural terms. Specifically, the "front, rear and a first and a second side wall" are perpendicular to the bottom support, with the "first side wall extending substantially higher" than the other walls.FN14

FN13. W.Mem. 3 wrongly claims that all four walls function to form a protective barrier. As the claim language makes plain, only the higher side wall is said to perform that role.

FN14. Indeed, it could reasonably be argued, as M.Mem. 11 does, that structure *only* is recited by this claim element.

W.Mem. 3 attempts to transform the structure into function by stating that "the claimed function is 'defining front, rear and a first and a second side wall' " and that "defining something is not structure-it is a function." That odd notion is not only unsupported by any authority but also runs contrary to common sense, for "definition" and "structure" are practically synonyms. Regardless, complex language involving complex technology is not at issue. Claim 1 talks about four walls, one higher than the others,FN15 and the element conveys to any casual reader the structure and orientation of those walls. Hence element 2 is not in means-plus-function format.

FN15. In fact, as W.Mem. 4 states (including the numbers given to the four walls in the '419 Patent's illustrations), "[b]oth parties agree that the corresponding structure to this limitation is the front wall 68, back wall 70 and side walls 72 and 74."

### ***"A First ... Side Wall" in Element 2***

[7] That generic determination as to element 2 is not the end of the analysis, for some of its phrases must still be construed. First, as to the phrase "a first ... side wall," M.Mem. 12 contends that "wall" should be given its ordinary meaning, while W.Mem. 7-8 (emphasis in original) argues "that 'wall' means *integrally connected* elements lying in a similar planar orientation." FN16 Under that construction, because Whirlpool's allegedly infringing product has a detachable extension to the first side wall of its lower rack, it would not be part of that side wall.

FN16. Whirlpool's rack, the allegedly infringing element, includes a "side extension assembly" that is "separately formed and snapped on" to the top of "the first wall, but not integrally connected to" that wall (W.Mem.8).

But nothing in the claim language or the specification compels-or even suggests-that conclusion. Instead Whirlpool again attempts to bolster its proffered definition with dubious and convoluted "reasoning." FN17 First, W.Mem. 5-6 argues that the "wings" that "extend perpendicularly from the side wall ... to form an extension of the front and back walls ...," as described in the specification (col.5, 11.62-63), must be construed as part of the first side wall. That is because if they are truly viewed as "extension [s] of the front

and back walls," then the first side wall is not "substantially higher" than the front and back walls.

FN17. What follows would surely fail Logic 101. Although element 2 describes the means including the side wall as being "perpendicular to" the bottom rack, Whirlpool debates whether that wall is an upright structure. W.Mem. 5 states that the '419 specification also uses the term "wall" to describe horizontal structures. But it is of course possible to speak of horizontal walls and vertical barriers (or "side walls") without actually using the terms "horizontal" and "vertical" if the context makes such usage redundant. In this case, because the wall is perpendicular to the bottom rack, a further description of the wall as vertical would be purely tautological.

But the question whether the wings are *part* of that side wall or of the front or back walls poses a false issue. They are what the claim says they are, connected and "extend[ing] from the side wall ... to [act as] an extension of the front and back wall." In other words, they do not alter the normal usage of the walls as such, denoting vertical structures—a normal usage that gives normal content to the claim's provision that the first side wall is "substantially higher" than the other walls.

W.Mem. 6-7 further argues that the term "wall" must have the same detailed meaning as to the first side wall as it does with respect to the bottom support wall.FN18 If so, Whirlpool contends that Maytag's ordinary meaning argument would not fly because the bottom support "wall" is defined by Maytag as being distinct from the two axles that perform the same function as the wall. That dubious argument is said to be predicated on the deposition testimony of Dennis Purtilo ("Purtilo"), the inventor of the racking system (see W.Mem. 7 n. 6). Whirlpool's position is extraordinarily strained, building one doubtful inference on another, and M.R.Mem. 6 persuasively argues that the argument should be disregarded.

FN18. That particular "wall" is referred to in the specification and the claims in interchangeable terms: as either the "bottom support *wall* " or the "bottom support *means*."

### ***Side Wall "Extending Substantially Higher" in Element 2***

[8] Also in dispute between the litigants is the phrase "extending substantially higher than said front, rear and second side walls to define a protective barrier." M.Mem. 13 states that "substantially higher" plainly means what it says, so its ordinary meaning should apply. But W.Mem. 9 seeks to include the wall's functional purpose—defining a protective barrier—as part of that definition. Under that view, a high wall that did not act as a protective barrier would not conform to element 2.

That position is persuasive, because the functional purpose plainly set forth in the quoted phrase cannot fairly be separated from the structure itself. It would be entirely possible for a side wall to be structurally similar to but functionally different from a wall described in that phrase.FN19 Because the claim language expressly states the purpose of the side wall is to act as a protective barrier, a side wall that is "substantially higher" than the other walls but does not serve that function does not come within that element.

FN19. For example, the added height of a side wall could (1) provide some utility other than acting as a protective barrier or (2) be intended for purely aesthetic purposes.

W.Mem. 11 further argues that such a protective barrier requires "oversize, large or tall articles to directly engage the side wall so that they are prevented from leaning over to engage the side panel of the washing chamber." But nothing in the claim language requires such a further narrowing of the element's terms, and it is not implausible that a side wall can act as a protective barrier without being in direct contact with items in the washer.

In sum, while the term "substantially higher" is construed according to its plain meaning, the higher wall must act as a protective barrier. Whether the side wall of Whirlpool's accused device does in fact act as a protective barrier is a factual question for trial.FN20

FN20. While M.R.Mem. 7-8 wants to debate whether the side wall attachment in Whirlpool's washer acts as a protective barrier, this Court declines to depart from the *Markman* role of construing the patent's claims by engaging, in essence, in a factual determination of whether the accused device functions in that fashion.

### ***Element 3 of Claim 1 Is Governed by Section 112 para. 6***

[9] It will be recalled that element 3 reads this way:

rack mounting means associated with opposed side panels of said washing chamber; and an upper rack supported above said lower rack by said rack mounting means.

Here the presumption that element 3 is in means-plus-function form because of the word "means" is *not* overcome, because insufficient structure is recited to perform the claimed function. Despite Maytag's protests (see M.Mem. 16-17), the claim's literal language states a function: that of a mounting a rack. FN21 Even so, M.Mem. 17 argues that the recitation of "the rack mount" and its location provides sufficient structure.

FN21. M.Mem. 17 acknowledges that if this Court reads claim element 3 as being in means-plus-function form, then "the function is to mount a rack." But M.R.Mem. then also argues that the function cannot be that of mounting a rack because that "is part of the 'means', not a 'function.'" Under that untenable logic-for which no authority is offered-a claim element that read "paper shredding means comprising x, y and z" would be purely structural, even though it is plain to all that the function is that of shredding paper.

But "rack mount" does not call to mind any particular (or, indeed, even any more general) structure, and Maytag makes no reference to any industry-specific definition. Because that is the only possible source of structure in the element, the cases cited by M.R.Mem. 9 ( *Cole*, 102 F.3d 524, 531 and *Personalized Media Communications*, 161 F.3d at 704) are not on point. FN22 Moreover, a statement of location alone does not obviate the need for some structure.

FN22. M.R.Mem. 9 glosses over the lack of structure conveyed by the phrase "rack mount," thus improperly eliding an analytical step that was crucial in the cases that it cites.

That being so, this Court construes claim element 3 as coming within Section 112 para. 6. As such, it is construed to cover the corresponding structure for the track and roller assembly and its equivalents.



While the parties agree as to some of the specification's corresponding structure detailed in the preferred embodiment (see M.Mem. 17, W.Mem. 12), they dispute a key portion ('419 Patent col. 4, 11. 7-18):

The upper dish rack 14 is mounted to the dishwashing chamber 12 by a track and roller assembly 18 located on opposite side panels 22 of the dishwashing chamber 12. Various track and roller assemblies can be used and are known to those skilled in the art. *The track and roller assembly 18 located on one side panel 22 of the dishwashing chamber 12 is vertically offset from the track and roller assembly 18 located on the opposite side panel 22 of the dishwashing chamber 12 to provide maximum racking space in the lower rack 16. The lower dish rack 16 rolls in and out of the dishwashing chamber 12 on wheels 20.*

M.Mem. 17, while adopting the first portion, discounts the underscored part because it contends that the preferred embodiment does not limit the claim.

[10] It is conventional wisdom that a means-plus-function limitation is not necessarily defined by the preferred embodiment. As *Micro Chem.*, 194 F.3d at 1258 says:

Identification of corresponding structure may embrace more than the preferred embodiment. A means-plus-function claim encompasses all structure in the specification corresponding to that element and equivalent structures.

It is true that the specification displays no other structure or embodiment that does not have vertically offset track and roller assemblies. But no function FN23 can reasonably be ascribed to the sentence "Various track and roller assemblies *can be used* and are known to those skilled in the art" than a forthright disclaimer of the specific depicted assembly as an integral component of the monopoly sought by the patent claim. Whirlpool would effectively read the specification as though that sentence were not there at all. Nor is that disclaimer somehow transformed into a claim limitation by Maytag's statement that the depicted offset version of the assembly seeks "to provide maximum racking space in the lower rack" (again, treating that as trumping the disclaimer would impermissibly read the disclaimer sentence right out of the specification).

FN23. Double entendre intended.

That conclusion is buttressed by the doctrine of claim differentiation. Though that doctrine is "not a hard and fast rule of construction" ( *Comark Communications, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed.Cir.1998)), its presumptive effect is plainly operative here. M.Mem. 18 is correct in objecting that Whirlpool's proposed construction of Claim 1 makes it all too similar to Claim 2, the very thing that triggers the operation of the claim differentiation presumption.

In sum, even though element 3 of claim 1 is to be construed in light of the specification and its disclosure of structure, that does not extend (that is, it is not limited) to a structure in which the track and roller assemblies must be vertically offset. And that means the rejection of the further step, urged on this Court by W.Mem. 13, of "find[ing] that a rack mounting system that is not vertically offset cannot be an 'equivalent structure' in view of the specification and claimed invention." FN24

FN24. It is worth noting that the Federal Circuit has not yet decided "whether a determination of equivalents under s. 112, para. 6 is a question of law or fact" ( *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus.*,

Inc., 145 F.3d 1303, 1309 (Fed.Cir.1998), quoting that court's en banc opinion in *Markman*, 52 F.3d at 977 n. 8).

### ***"Adjacent" in Element 4***

[11] Maytag and Whirlpool also debate as to whether the use of "adjacent" in element 4 means that a stepped portion of the upper rack "is near to" or, more narrowly, must "abut" the first side wall of the lower rack (see M.Mem. 19-20, W.Mem. 15-16).FN25 Functionally, an upwardly stepped portion is above and "adjacent" to the high side wall of the lower rack so that space exists for large items to fit into the lower rack (see M.Mem.App. 5 at 3). But purporting to look at how "adjacent" is used in the specification, W.Mem. 16-17 argues that if any portion of the washer comes between the upper stepped portion of the rack and the lower side wall, they are not "next to" (hence not "adjacent to") each other.

FN25. Room certainly exists for such a debate. *Webster's Third New Int'l Dictionary* 26 (examples omitted) provides these different alternative definitions of "adjacent":

1a: not distant or far off: nearby but not touching

b: relatively near and having nothing of the same kind intervening: having a common border

Thus the second listed definition, but *not* the first, is synonymous with "abutting."

That argument does not convince. While it is appropriate to look at the specification, W.Mem. 15-16 strains to reconstruct from its language the meaning that Whirlpool desires. Significantly, it simply does not follow that because one portion of the specification may use the term "adjacent" to refer to items that are directly next to each other or even attached, "adjacent" then necessarily takes on its narrower definition in all subsequent uses (see W.Mem. 16). After all, the broader and first-listed definition of "adjacent" also encompasses the depiction of items that are right next to each other.

In that respect, it is relevant that (quite contrary to Whirlpool's assertion at W.Mem. 28) the functionality of having the stepped portion of the upper rack above the high side wall is not destroyed if the side wall of the lower rack and the stepped portion of the upper rack are not directly next to each other. Sufficient space can exist for the placement of large items on the bottom rack if the extra space created by the upwardly stepped rack is used to accommodate an intervening part. Indeed, the accused device is so configured (see W.Mem. Ex. 2 fig. 11).

In short, despite Whirlpool's efforts this Court finds that the more natural and more appropriate definition of "adjacent" in light of the function involved is Webster's first-listed meaning of "near" or "close." Hence an intervening design element does not prevent two other elements from being "adjacent" to one another.

### ***Claim 3 of the '419 Patent***

Claim 3 of the '419 Patent logically divides into these five numbered elements:

A dish racking system for a washing chamber of a dishwasher including a basic rack comprising:

1. a bottom support wall including a plurality of spaced-apart generally longitudinal and lateral wire members;

2. wall means formed at least partially from said wire members and extending generally perpendicular to said bottom support wall for defining front, rear and side walls of said basic rack,

3. one of said side walls extending substantially higher than said front, rear and other side wall to define a protective article support between a side panel of said washing chamber and large articles racked for washing adjacent said one side wall; and

4. a pivotal shelf located generally intermediate said bottom support wall and the upper edge of said one side wall,

5. said shelf spaced laterally inward from said one side wall and forming a front-to-rear gap therebetween in one position of said shelf for supporting selected articles to be washed.

Elements 2 through 5 are disputed by the parties.

### ***"Wall Means" in Element 2***

While it is agreed that element 2 does not provide a means-plus-function limitation, FN26 the parties do not agree on how to construe the term "walls." That debate is the same one already addressed as to element 2 of claim 1. As stated earlier, nothing indicates that the first side wall must comprise integrally connected parts.

FN26. W.Mem. 18 concedes that, unlike element 2 in claim 1, element 2 in claim 3 adds sufficient structure through the phrase "formed at least partially from said wire members."

### ***Side Wall "Extending Substantially Higher" in Element 3***

Once again this dispute is exactly the same as the quarrel regarding the "substantially higher" language in element 2 of claim 1. And once again the earlier analysis holds true here.

### ***Element 4***

[12] As to element 4, W.Mem. 20 argues that in accordance with its proposed reading as to the one side wall, its own "pivotal shelf" is not "intermediate" between the "bottom support wall and the upper edge of ... the side wall" because its shelf is on an extension *above* the side wall. But this Court's earlier reading of the "side wall" term forecloses that contention. Hence the scope of element 4 encompasses pivotal shelves attached to wall extensions if those shelves are "located generally intermediate" the bottom of the rack and the top of the side wall.

### ***Element 5***

[13] Maytag and Whirlpool dispute the construction of the element 5 language emphasized here:

said shelf *spaced laterally inward* from said one side wall and forming a *front-to-rear gap* therebetween in one position of said shelf for *supporting selected articles* to be washed

W.Mem. 20 contends those three phrases must be read together to "properly interpret this limitation." According to Whirlpool, "the 'front-to-rear gap' must be sufficiently large to receive the 'selected articles'

and the 'laterally inward' spacing must also be sufficiently large so as to provide the appropriate sized gap" (W.Mem.21). Whirlpool emphasizes that the specification describes the gap as "allow[ing] large articles such as cookie sheets and pizza pans to be placed between the pivotal shelf 80 and the side wall 72" ('419 Patent col. 5, 11. 54-56).

Maytag's position (M.Mem.26) is that the gap need not be either a long single gap or a quite wide single gap (or both) and that Whirlpool's arguments on that score lead to importing "several limitations that appear nowhere in the claims and are nowhere suggested by the specification." In particular, M.R.Mem. 14 (emphasis in original) charges Whirlpool with overreaching by claiming "that because the specification references certain large items in the gap, the gap must extend *all the way* from the front of the rack" and "that for 'front-to-rear' to mean orientation rather than longitudinal extent would create a 'superfluous' claim requirement." Maytag is right.

In that respect Whirlpool has glossed over (or, more accurately, has omitted entirely) the fact that the claim specifies the gap's orientation by its reference to "a front-to-rear gap *therebetween*." That emphasized word is *not* a reference back to designate the distance between the front and rear walls—terms that are regularly used throughout the patent claims, and that specifically appear in element 2 of the claim now under consideration (claim 3). Instead "therebetween" plainly refers to the space between the higher side wall and the pivotal shelf in one position of the shelf—and that being so, "front-to-rear" simply characterizes that gap in longitudinal rather than lateral terms, without in any way specifying or indicating the longitudinal dimension.

If Maytag's patent counsel, whose total work product in drafting the claims has demonstrated the typical patent lawyer's fondness for detail in drafting (and of course the typical prolific use of the adverbial form), had wished to limit the claim as Whirlpool urges, it would have been the easiest thing in the world to say "a front-to-rear gap between the front and back walls of said basic rack" (note the comparable usage in element 2) rather than the very different meaning of "a front-to-rear gap therebetween." And similarly, if Maytag's counsel had wished to limit the claim (as Whirlpool also urges) by restricting the use of the gap to such large articles as those referred to in the specification by way of illustration, it would likewise have been the easiest thing in the world to say something along the lines of the gap's "supporting *particularly large* articles to be washed,FN27" rather than simply referring to " *selected* articles." Nothing supports Whirlpool's attempted redrafting of element 5 to convert it from indicating a user's choice (of "selected articles," perhaps—but not necessarily—selected from among "large articles") into a limitation that is restricted to extraordinarily large articles or the like.

FN27. Note that element 3 already refers to the function of the one substantially higher side wall as providing support for the racking and washing of "large articles."

In much the same way, in turning from the length of the gap to its width, W.Mem. 22-23 offers up the unpersuasive contention that the pivotal shelf must be "spaced laterally inward" sufficiently to make the gap wide enough to accommodate cookie sheets and pizza pans. But again nothing in the claim language calls for such a restrictive construction. While W.Mem. 23 would have this Court measuring the width of cookie sheets and pizza pans to determine exactly how far "laterally inward" the shelf is placed, doing that would obviously import limitations from the specification into the claim language. Standing alone, the claim language is plain enough: It merely requires the shelf to be laterally inward so as to form the previously described front-to-rear gap. In other words, the spacing between the shelf and the side wall does not have to

meet some particular measure, but must merely be located "laterally inward." FN28

FN28. W.Mem. 23-24 contends that the term "selected articles" must have a meaning related to the cookie sheet and pizza pan cited in the specification and cannot "mean any possible article." But while the specification may be a useful aid in claim construction, limitations in the specification are not to be imported in the claim. Instead the term "selected articles" in element 5 merely means, as the normal meaning of those words connotes, some articles that can fit into a front-to-rear gap created by placing the shelf laterally inward from the side wall.

### *Claim 4 of the '419 Patent*

Claim 4 can be framed in terms of three elements:

A dish racking system according to claim 3 and

1. further including a second rack spaced above said basic rack and
2. rack mounting structure supporting said second rack for movement into and out of said washing chamber,
3. said second rack having bottom support means and front, rear and side walls with said bottom support means upwardly stepped above said one higher side wall of said basic rack.

Element 1 is not at issue, but the parties differ as to elements 2 and 3.

### *Element 2*

[14] First, the parties dispute whether element 2 is governed by Section 112 para. 6. Because the words "means" is not used, there is a presumption that the element is not in means-plus-function form. But W.Mem. 25 contends that the element is purely functional, with the words "rack mounting" and "structure" failing to connote sufficient structure.

M.Mem. 28 attempts to counter with the completely conclusory assertion that "the term 'mounting structure' has a meaning that is understood in the field," but it offers zero support for that conclusion. Thus having failed to establish a term of art that connotes *basic* structure, Maytag lacks the necessary predicate to urge that a *precise* structure is not needed to escape the application of Section 112 para. 6. Indeed, the very authority sought to be invoked by M.Mem. 29, *Personalized Media Communications*, 161 F.3d at 704-05, teaches that "precise physical structure" is not required only if the claim sets forth a term "connotative of structure" to those of skill in the art. Whirlpool wins on this issue.

### *"Above" in Element 3*

[15] Turning to the term "above" in element 3, FN29 W.Mem. 27 echoes Whirlpool's claim 1 contention by asking for the more specific meaning of " 'directly over' something else." But nothing in the claim language calls for such a narrow definition. If anything, the earlier analysis as to the use of the word "adjacent" applies here a fortiori. In normal parlance, the spatial relationship indicated by the term "above" far less frequently connotes "immediately above" than "adjacent" suggests "immediately abutting." Importantly, the functionality obtained by placing the stepped portion of the upper rack above the high side wall of the lower

rack is not necessarily thwarted if the stepped portion is not directly over the side wall, for oversized items can still fit into the larger space created on that side of the washer. In all events, though, the functionality is not incorporated in the claim language.

FN29. That element is similar to claim 1's element 4, but one difference is its use of the word "above" instead of "adjacent."

But Maytag goes too far in asserting (M.R.Mem.18) that its claim should be read as calling for all three stepped portions of the upper rack to be "above" the high side wall of the lower (basic) rack. Any such proposed construction is really just a red herring, for it is apparent from the claim language, read in context of the patent as a whole, that the stepped portion of the upper rack must be positioned "above" the high side wall to create sufficient space for oversized items.FN30 That functional purpose is not served by stepped portions of the upper rack that are positioned too far inward from the high side wall of the lower rack.

FN30. If Maytag had wanted to advert to all three stepped portions, it could readily have drafted the element to say (for example) "above said basic rack" rather than "above said one higher side wall of said basic rack" (contrast element 1 with element 3). Indeed, M.Mem. 29 characterizes the term "above" as identical to "adjacent," and the other less elevated steps are certainly not adjacent to the high side wall of the lower rack.

This Court therefore rejects both polar positions offered by the parties. As used in element 3, "above" means neither "directly above" nor simply "at a higher place than." Instead it means "at a place higher than the high side wall such that a sufficient space is formed laterally inward from that side wall and vertically between that wall and the stepped portion of the upper rack to enable the washing of oversized articles."

### *Conclusion*

This opinion has construed each of the representative claims as a matter of law. It remains for this Court to do the same as to the claims involved in Whirlpool's counterclaim. When that is done the case will be ready for the classic second phase of a patent case: a jury determination on the issues of infringement and invalidity.

N.D.Ill.,2000.

Maytag Corp. v. Whirlpool Corp.

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