**THIS OPINION IS NOT BINDING PRECEDENT OF THE BOARD**

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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KAZUO SANADA,

Junior Party,
(Patent No. 6,352,379)

v.

JAMES H. REYNOLDS, DAVID H. LEVY, and
MARK E. IRVING

Senior Party,
(Application 09/592,243)

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Patent Interference No. 105,029

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Before STONER, Chief Administrative Patent Judge, and BARRETT and LEE, Administrative Patent Judges.

LEE, Administrative Patent Judge.

**Decision on Response to Show Cause Order**

Background

On February 11, 2003, this panel issued a show cause order against senior party Reynolds in connection with the patentability of senior party's application claim 7. (Paper No. 3). On March 5, 2003, we received a response from the senior party. (Paper No. 17).

The body of the show cause order issued on February 11, 2003 (Paper No. 3), is reproduced below, in italics, to provide context:

## *Introduction*

*At issue in this show cause order is the patentability of [senior] party Reynolds' claim 7. Specifically, the issue concerns interpretation of an element recited in [senior] party's claim 7 as "a destroying member for destroying said thermally processed film after said film has been scanned."*[1] *While conferring with the administrative patent judge with regard to declaration of this interference, the primary examiner has informed the administrative patent judge that the examiner:*

> *1. Finds that in the field of developing photographic films, the name "destroying member" does not have an established conventional meaning that identifies some structure short of every structure capable of destroying a photographic film;*
>
> *2. Concludes that the recitation "a destroying member for destroying said thermally processed film after said film has been scanned." does not set forth a means-plus-function element under 35 U.S.C. § 112, last paragraph; and*

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[1] *The entirety of Reynolds' claim 7 reads as follows:*

> *An image processing apparatus comprising:*
>
> *a heater for heating an exposed thermal film to a temperature suitable for thermal processing of said exposed film;*
>
> *a scanner for scanning said thermally processed film to create a digital record file representative of images on said thermally processed film; and*
>
> *a destroying member for destroying said thermally processed film after said film has been scanned.*

> *3. Concludes that the term "destroying member" is purely functional and encompasses any and every means for destroying film.*

*If the finding and conclusions of the examiner are correct, which we assume they are until shown otherwise by either party, then [senior] party's claim 7 is unpatentable. In our view, under the Supreme Court's decision in* <u>*Halliburton Oil Well Cementing Co. v. Walker*</u>*, 329 U.S. 1, 71 USPQ 175 (1946), there is a judicially created "dead zone" for claims using purely functional language to define a structural component. An exception exists only when such language is regarded as a means-plus-function clause under 35 U.S.C. § 112, last paragraph and narrowly construed under the same.* <u>*Given the examiner's finding and conclusions, claim 7 is unpatentable*</u>*. In response to this show cause order, the [senior] party may seek to demonstrate that the examiner's underlying finding and conclusions as noted above are erroneous.*

<u>*Discussion*</u>

*The sixth or last paragraph of 35 U.S.C. § 112 states:*

> *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.*

*The above-quoted paragraph of 35 U.S.C. § 112, when enacted, was a statutory response to the Supreme Court's decision in Halliburton Oil Well Cementing Co. v. Walker, 329 U.S. 1, 71 USPQ 175 (1946). In Halliburton,*[2] *the Supreme Court held invalid an apparatus claim on the ground that it used a "means-plus-function" term which was purely functional. Such a claim was improper because the means term with a stated function merely described a particular end result, did not set forth any specific structure, and would encompass any and all structures for achieving that result, including those which were not what the applicant had invented. In Greenberg v. Ethicon Endo-Surgery Inc., 91 F.3d 1580, 1584, 39 USPQ2d 1783, 1785 (Fed. Cir. 1996), the Court of Appeals for the Federal Circuit stated:*

> *As this court has observed, "[t]he record is clear on why paragraph six was enacted." In re Donaldson Co., 16 F.3d 1189, 1194, 29 USPQ2d 1845, 1849 (Fed. Cir. 1994)(in banc). In Halliburton Oil Well Cementing Co. v. Walker, 329 U.S. 1, 71 USPQ 175 (1946), the Supreme Court held invalid a claim that was drafted in means-plus-function fashion. Congress enacted paragraph six, originally paragraph three, to overrule that holding.* ***In place of the Halliburton rule, Congress adopted a compromise solution****, one that had support in the pre-Halliburton case law:* ***Congress permitted the use of purely functional language in claims, but it limited the breadth of such claim language by restricting its scope to the structure disclosed in the specification and***

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[2] *Halliburton was the culmination of a long line of cases dealing with use of terms such as "means" and "mechanisms" in claims. See, e.g., A.W. Deller, Walker on Patents, § 166, pp. 790-794 (Deller's Edition 1937).*

***equivalents thereof***. *See Valmont Indus., Inc. v. Reinke Mfg. Co., 983 F.2d 1039, 1041-42, 25 USPQ2d 1451, 1453-54 (Fed. Cir. 1993); In re Fuetterer, 319 F.2d 259, 264 n.11, 138 USPQ 217, 222 n.11 (CCPA 1963). (Emphasis added.)*

*As the Federal Circuit explained, the statutory solution represents only a compromise. The so-called "Halliburton rule" against use of "purely functional claim language" has not been completely eliminated. Rather, "purely functional claim language" is now permissible but only under the conditions of 35 U.S.C. § 112, sixth paragraph, i.e., if its scope is limited to the corresponding structure, material, or act disclosed in the specification and equivalents thereof. In the absence of such limited construction, the Halliburton rule is still applicable to prohibit the use of "purely functional" claim language to define a structural component. Hence, any claim that includes purely functional claim language and which, for whatever reason, is not subject to the limited construction under 35 U.S.C. § 112, sixth paragraph, falls into a "dead zone" according to the Halliburton rule as applied by the Supreme Court in 1946 and thus is unpatentable.*

*While the particular claim language involved in the Supreme Court's Halliburton decision uses the word "means," the issue was claiming in a purely functional manner, a practice condemned by pre-existing case law, and not any particular problem associated uniquely with the word "means" as distinguished from other purely functional words and phrases. With regard to pre-existing case law around the time of the Supreme Court's Halliburton decision, see In re*

*Fuetterer, 319 F.2d 259, 263, 138 USPQ 217, 221 (CCPA 1963), wherein the Court of Customs and Patent Appeals explained:*

> *In the Fullam case [In re Fullam, 161 F.2d 247, 73 USPQ 399 (CCPA 1947)], this court stated that some claims were properly rejected as "functional in claiming merely the desired result well known to and sought after by workers skilled in the art." Claims directed* ***merely*** *to a "desired result" have long been considered objectionable primarily because they cover any means which anyone may ever discover of producing the result. See, e.g., O'Reilly v. Morse, 15 How. 62; Heidbrink v. McKesson, 290 F. 665. (Emphasis in original.)*

*In Greenberg v. Ethicon Endo-Surgery Inc., 91 F.3d 1580, 1584, 39 USPQ2d 1783, 1786 (Fed. Cir. 1996), the Court of Appeals for the Federal Circuit stated:*

> *We do not mean to suggest that section 112(6) is triggered only if the claim uses the word "means."* ***The Patent and Trademark Office has rejected the argument that only the term "means" will invoke section 112(6)****, see 1162 O.G. 59 n.2 (May 17, 1994),* ***and we agree****, see Raytheon Co. v. Roper Corp., 724 F.2d 951, 957, 220 USPQ 592, 597 (Fed. Cir. 1983), cert. denied, 469 U.S. 835, 105 S.Ct. 127, 83 L.Ed.2d 69 (1984) (construing functional language introduced by "so that" to be equivalent to "means for" claim language). (Emphasis added.)*

*The guideline provided by the Court of Appeals for the Federal Circuit on when to treat a certain claim language as means-plus-function recitation under 35 U.S.C. § 112, last paragraph, is clear. Use of the word "means" creates a presumption that § 112, sixth paragraph, applies. Personalized Media Communications LLC v. ITC, 161 F.3d 696, 703, 48 USPQ2d 1880, 1886 (Fed. Cir. 1998). Failure to use the word "means" creates a presumption that § 112,*

*sixth paragraph, does not apply. Id., 161 F.3d at 703-704, 48 USPQ2d at 1887.*

*But the presumptions can be rebutted. The Federal Circuit stated:*

> *These presumptions can be rebutted if the evidence intrinsic to the patent and any relevant extrinsic evidence so warrants. [Footnote omitted.] See, e.g., Cole v. Kimberley-Clark Corp., 102 F.3d at 524, 531, 41 USPQ2d 1001, 1006 (Fed. Cir. 1996) (noting that whether § 112, ¶ 6 is invoked involves an analysis of the "patent and the prosecution history," and consulting a dictionary definition of "perforation" to understand if one of skill in the art would understand this term to connote structure). In deciding whether either presumption has been rebutted, the focus remains on* ***whether the claim as properly construed recites sufficiently definite structure to avoid the ambit of § 112, ¶ 6****. [Citation omitted.] (Emphasis added.)*

*Id., 161 F.3d at 704, 48 USPQ2d at 1887.*

*In Personalized Media Communications LLC, 161 F.3d at 704, 48 USPQ2d at 1887, the Federal Circuit found that the phrase "detector" "had a well known meaning to those of skill in the electrical arts connotative of structure, including a rectifier or demodulator,"* ***is not*** *"a generic structural term lacking a clear meaning such as 'means,' 'element,' or 'device,'"* ***and is not*** *"a coined term lacking a clear meaning, such as 'widget,' or 'ram-a-fram.'" On that basis, the Court determined that "detector" was sufficiently structural and adding the term "digital" in front of "detector" only further limited a sufficiently structural feature. Consequently, 35 U.S.C. § 112, sixth paragraph, did not apply.*

*In Greenberg v. Ethicon Endo-Surgery Inc., 91 F.3d at 1583, 39 USPQ2d at 1786, the Federal Circuit determined that the term "detent" or "detent*

*mechanism," as the name for structure, has a reasonably well understood meaning in the art and therefore is sufficiently structural and not purely functional. On that basis, it was determined that 35 U.S.C. § 112, sixth paragraph, did not apply.*

*These recent opinions from the Court of Appeals for the Federal Circuit make abundantly clear that either a particular phrase at issue itself has limiting structure or 35 U.S.C. § 112, sixth paragraph, applies to limit the purely functional phrase to corresponding structural embodiments disclosed in the specification and equivalents thereof. There is no area in between the two, where a purely functional recitation, not limited by 35 U.S.C. § 112, sixth paragraph, can survive. A "dead zone" exists under the Supreme Court's Halliburton case for claims having purely functional claim language but outside the application of 35 U.S.C. § 112, sixth paragraph.*

*The sixth paragraph of 35 U.S.C. § 112 has just as much application during proceedings before the U.S. Patent and Trademark Office as it does in district court cases for infringement matters. In re Donaldson, 16 F.3d 1189, 1194, 29 USPQ2d 1845, 1849 (Fed. Cir. 1994) (in banc). Thus, Paragraph No. 21(b) of the Standing Order (attachment to Paper No. 1) requires each party in an interference proceeding, within twenty-eight (28) days of the date of declaration of this interference, to submit a separate paper containing a copy of its claims in which:*

> *(b) Following each means or step for performing a specified function are inserted in bold in braces { }, all structure, material or acts described in the specification corresponding to that means or step (by citation to the page(s) and line(s) of the specification and/or figure and item number of the drawings).*

*[Senior] party Reynolds' application claim 7 includes recitation not employing the language "means" but sets forth no structural delineation of the claimed element. Specifically, [senior] party Reynolds' application claim 7 recites:* ***"a destroying member*** *for destroying said thermally processed film after said film has been scanned." Although applicant's claim 11 includes a similar recitation, claim 11 goes on to further specify that the destroying member "is a chemical treatment which binds the film onto itself so that it cannot be unwound." While applicant's claims 8, 9, and 10 each depend from claim 7, claim 8 specifies that the destroying member "is a film shredder which shreds said film"; claim 9 specifies that the destroying member "is a high intensity illuminator"; and claim 10 specifies that the destroying member "is a chemical treatment which obscures images on the film." Thus, only the recitation in [senior] party's claim 7 is regarded as purely functional and without any structural requirement.*

*This show cause order concerns solely with [senior] party Reynolds' claim 7. No other claim of the junior party nor any claim of the senior party is subject to this show cause order. In proposing this interference the examiner has made particular findings and claim interpretation with regard to the above-quoted claim language of [senior] party Reynolds' application claim 7.*

*The examiner has found, in this case, that in the field of developing photographic films there is no known or established conventional meaning for "a destroying member" that destroys a processed film, as far as the structure of the component is concerned. The examiner has determined that "a destroying member," as is recited in the [senior] party's claims, for destroying a thermally processed film is essentially unlimited in scope structurally and would cover any and all devices and mechanisms which are capable of destroying he processed film. In other words, the generic recitation of the term "member," coupled with the functional prefix "destroying" sets forth a purely functional claim recitation. Yet, the examiner also determined that 35 U.S.C. § 112, sixth paragraph, does not apply here, apparently because the recitation at issue does not use the term "means."*

*The Court of Customs and Patent Appeals has long ago indicated that a rejection based on "functionality" of claim language has merit if the type of functionality is not covered by the last paragraph of 35 U.S.C. § 112, and if there exists a body of extra-statutory case law which condemns that type of functionality. In re Fuetterer, 319 F.2d at 262-63, 138 USPQ at 221. That is the case here based on the examiner's finding that in this art the term "destroying member" is not a recognized or established name for structure but simply means anything that can destroy a photographic film, and the examiner's conclusion that 35 U.S.C. § 112, sixth paragraph does not apply. The issue should not be*

*misunderstood. It is not simply use of functional language in a claim. There is nothing wrong with using functional claim language, where the means-plus-function provision of 35 U.S.C. § 112 applies or where such functional language further limits structure or composition already defined in the claim. See, e.g., In re Swinehart, 439 F.2d 210, 212, 169 USPQ 226, 228 (CCPA 1971) ("[T]here is nothing intrinsically wrong with the use of such a technique [functional language] in drafting patent claims."). In Swinehart, at issue was the functional phrase "transparent to infra-red rays" which limited the claimed composition of a solidified melt of $B_aF_2$ and $C_aF_2$ in a proportion approximately eutectic.*

*The problem lies, as explained above, in use of "purely functional" claim language to provide the entire definition of a structural component and without the application of 35 U.S.C. § 112, last paragraph. In In re Swinehart, 439 F.2d at 213, 169 USPQ at 229, the Court of Customs and Patent Appeals indicated that it had found no prior decision of any court which may be said to hold that there is some ground for objecting to the use of functional claim language "beyond what is already sanctioned by the provisions of 35 U.S.C. § 112." The quoted language recognizes the applicability of 35 U.S.C. § 112, sixth paragraph, to purely functional claim terms. The CCPA's opinion in Swinehart does not provide a safe haven or protection for purely functional claim recitations from the application of 35 U.S.C. § 112, last paragraph.*

*For the foregoing reasons, and based on the above-noted particular findings and claim interpretation of the primary examiner, we find that [senior] party Reynolds' claim 7 is unpatentable under the so-called Halliburton Rule as was referenced by the Court of Appeals for the Federal Circuit in Greenberg v. Ethicon Endo-Surgery Inc., 91 F.3d 1580, 1584, 39 USPQ2d 1783, 1786 (Fed. Cir. 1996). Accordingly, it is*

***ORDERED** that judgment of unpatentability will be entered against [senior] party Reynolds' application claim 7 unless, within 21 days of the date of this order [senior] party Reynolds shows good cause why its claim 7 is not unpatentable under the so-called "Halliburton Rule" against use of purely functional claim language to define a structural component;*

***FURTHER ORDERED** that [junior] party Sanada may not file a reply to [senior] party's response unless instructed to do so by the board at a later time; and*

***FURTHER ORDERED** that the [senior] party's response to this show cause order may*

*(1) seek to demonstrate that the recitation "a destroying member for destroying said thermally processed film after said film has been scanned" should be regarded as a means-plus-function recitation under 35 U.S.C. § 112, sixth paragraph;*

*(2) submit evidence to demonstrate that in the field of developing photographic films, "destroying member" as a name for a structural device actually has an established conventional meaning that is not so broad as to encompass every structure capable of destroying a photographic film (the evidence shall include examples of structures that destroy photographic films but are not covered by the term); or*

*(3) present a persuasive argument that there is no such place as a judicially created "dead zone" for claims using purely functional language to define a structural component, subject to an exception now carved out by 35 U.S.C. § 112, sixth paragraph.*

Discussion

Senior party's response states on page 2:

In response to the show cause order dated February 20, 2003, it is submitted that the recitation in claim 7 of "a destroying member for destroying said thermally processed film after said film has been scanned" should be regarded as a means-plus function recitation under 35 USC 112, sixth paragraph. As explained on page 6 of the Show Cause Order [sic], it is recognized that failure to use the word "means" creates a presumption that 112, sixth paragraph does not apply but the presumption can be rebutted. It is noted that the term "a destroying member" in claim 7 is provided within the context of functional language to describe the feature of destroying the thermally processed film after the film has been scanned. That is, it is submitted that the functional claim language of claim 7 with respect to "a destroying member" is permissible under the conditions of 35 USC 112, sixth paragraph and thus, Applicants are entitled to the corresponding structure, material or acts disclosed in the specification and equivalents thereof.

As the show cause order explained, failure to use the word "means" creates a presumption that § 112, sixth paragraph, does not apply, but that presumption can be rebutted. We are satisfied by senior party Reynolds' submission that the term "a destroying member" was provided within a functional context to describe the functional feature of destroying the film and as such is permissible under the narrow rule of construction of 35 U.S.C. § 112, sixth paragraph. Senior party Reynolds does not agree with the examiner's interpretation of the term as covering any and every structure for performing the recited function and does not challenge our position that without the application of 35 U.S.C. § 112, sixth paragraph, to the term "a destroying member" in claim 7, that claim would be unpatentable under the principle set forth by the Supreme Court in Halliburton Oil Well Cementing Co. v. Walker, 329 U.S. 1, 71 USPQ 175 (1946).

## Conclusion

For the foregoing reasons, it is

**ORDERED** that the claim feature in senior party Reynolds' application claim 7 of "a destroying member for destroying said thermally processed film after said film has been scanned" is regarded as a means-plus-function recitation under 35 U.S.C. § 112, sixth paragraph,

and therefore good cause has been shown by senior party Reynolds on why its claim 7 is not unpatentable for reasons stated in the show cause order.

| | | |
|---|---|---|
| Bruce H. Stoner, Jr., Chief<br>Administrative Patent Judge | ) | |
| | ) | BOARD OF PATENT |
| Lee E. Barrett<br>Administrative Patent Judge | ) | APPEALS |
| | ) | AND |
| | ) | INTERFERENCES |
| Jameson Lee<br>Administrative Patent Judge | ) | |

Entered: 19 March 2003

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