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### PATENTS

The authors review two recent Federal Circuit decisions concerning means-plus-function treatment when a claim lacks the traditional means-for phrasing, and offer measures for avoiding such treatment when it is not intended and without too restrictively narrowing claim scope.

## Making Sense of Non(ce)sense—Seeking Broad Claim Coverage and Avoiding Unwanted Means-Plus-Function Treatment



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**W**hen seeking broad claim coverage, practitioners describe claim elements by what the elements do, rather than what the elements are. Practitioners use words like “mechanism,” “unit” and “device,” thinking their clients will receive a generous claim construction.

Not all practitioners appreciate, however, that their efforts sometimes risk a means-plus-function (“means-for”) claim construction. Courts have narrowed claims away from infringers and invalidated claims as indefinite by construing claim language under paragraph (f)

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of Section 112 of the Patent Act in a way the practitioner did not plan.

In two cases decided less than a month apart, the Federal Circuit took different approaches under the same precedent when determining whether to invoke means-for treatment to claim language that lacked the traditional means-for phrasing. With no apparent rationale for the different approaches, the decisions cast more uncertainty on an already imprecise subset of patent law. Nevertheless, practitioners can take measures to avoid unwanted means-for treatment and still seek broad claim coverage for their clients.

### Background

By statute, a patent applicant can express a claim element “as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof.”<sup>1</sup> A claim element that invokes Section 112(f) is “construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.”<sup>2</sup>

On its face, claiming an apparatus by function rather than structure seems a useful technique for broadly covering all possible structures that perform the function recited in the claim. But many practitioners avoid intentionally invoking Section 112(f) because claims that do will certainly not cover all possible structures that perform the recited function. Nor will the claims cover equivalents of the recited function.

<sup>1</sup> 35 U.S.C. § 112(f).

<sup>2</sup> *Id.*

To infringe a claim construed under Section 112(f), the accused device must perform the identical function claimed with a structure equivalent to that described in the patent specification.<sup>3</sup> And courts have determined that, to be considered an equivalent, the accused structure must represent an “insubstantial change” from the corresponding structure in the specification.<sup>4</sup> The practical effect is that a means-for limitation may only cover specific embodiments disclosed in the specification.

A court will presume that means-for treatment is intended when the word “means” appears in a claim. Conversely, when the word “means” is absent, a court will presume that means-for treatment does not apply. Both presumptions are rebuttable, and the presumption against means-for treatment in the absence of the word “means” is a strong one that is not easily overcome.<sup>5</sup>

### The Presumption Against Means-For Treatment Is Overcome

In October of 2014, in *Robert Bosch v. Snap-On*, the Federal Circuit applied means-for treatment to claim language with the nonce word “device.”<sup>6</sup> The *Bosch* court, relying on its holding in *Inventio AG v. Thyssen-Krupp Elevator*,<sup>7</sup> determined that the presumption against means-for treatment was overcome.<sup>8</sup>

The claims concern a diagnostic tester that determines whether a vehicle’s control unit requires reprogramming. Two phrases in the claims were found to invoke means-for treatment. The fatal phrases were “program recognition device” and “program loading device.”

The claim passage containing the program recognition device recites “a program version contained in a connected control unit is queried and recognized by means of the program recognition device.” The claim passage surrounding the program loading device recites “a respective most current version is loaded by the program loading device.”

The court initially presumed that neither of the phrases “program recognition device” or “program loading device” invoked means-for treatment,<sup>9</sup> even if preceded by the phrase “by means of.”<sup>10</sup>

But the presumption was overcome.<sup>11</sup> Citing *Inventio*, the court reached its decision by asking if the “claim language, read in light of the specification, recites sufficiently definite structure to avoid” means-for treatment.<sup>12</sup>

First, the phrases at issue were found to provide no structure. The term “device” was deemed a non-structural nonce word, and the terms “program,” “rec-

ognition” and “loading” merely identified functions to be performed.<sup>13</sup> Second, the specification described no structure for either device and included only functional descriptions for them. For instance, there was no teaching regarding how either device receives and processes signals.<sup>14</sup> Third, the court viewed expert testimony, intended to give structure to the phrases, as conclusory.<sup>15</sup> The court finally concluded that both phrases invoked means-for treatment because “[t]he claim terms, construed in light of the specification, fail to provide sufficiently definite structure to one of skill in the art.”<sup>16</sup>

After establishing means-for treatment, the court looked for corresponding structure in the specification. Finding none, it concluded that “program recognition device” and “program loading device” were indefinite and held that all of the claims were invalid.<sup>17</sup>

### The Presumption Against Means-For Treatment Is Not Overcome

Less than a month later, in *Williamson v. Citrix Online, LLC*, the Federal Circuit decided not to apply means-for treatment to claim language that included the word “module,”<sup>18</sup> a word the district court characterized as a nonce word.<sup>19</sup> The *Williamson* court also based its decision on *Inventio*.

The claims concern hardware and software systems that link a presenter to a virtual classroom. The claim passage at issue recites “a distributed learning control module for receiving communications transmitted between the presenter and the audience member computer systems and for relaying the communications to an intended receiving computer system and for coordinating the operation of the streaming data module.” Because “distributed learning control module” lacks the word “means,” the court initially presumed that the phrase did not invoke means-for treatment.<sup>20</sup>

Unlike its finding in *Bosch*, the court here found that the presumption was not overcome.<sup>21</sup> Citing *Inventio*, this time the court reached its decision by asking if “skilled artisans, after reading the patent, would conclude that [the] claim limitation is so devoid of structure that the drafter constructively engaged in means-plus-function claiming.”<sup>22</sup>

First, the term “module” was deemed more than merely a nonce word. In support of this finding, the court, *sua sponte*, attributed hardware and software structure to the term from dictionary definitions.<sup>23</sup> Second, the preceding words “distributed learning control” were found to narrow the phrase further, and the language following the phrase (“for receiving . . . for relaying . . . for coordinating”) was found to call for interconnections and intercommunications that a skilled ar-

<sup>3</sup> *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 934, 4 U.S.P.Q.2d 1737 (Fed. Cir. 1987) (en banc).

<sup>4</sup> *Chiuminatta Concrete Concepts, Inc. v. Cardinal Industries, Inc.*, 145 F.3d 1303, 46 U.S.P.Q.2d 1752 (Fed. Cir. 1998).

<sup>5</sup> *Inventio AG v. ThyssenKrupp Elevator Ams. Corp.*, 649 F.3d 1350, 1356, 99 U.S.P.Q.2d 1112 (Fed. Cir. 2011) (82 PTCJ 257, 6/24/11).

<sup>6</sup> *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 112 U.S.P.Q.2d 1617 (Fed. Cir. 2014) (88 PTCJ 1539, 10/17/14).

<sup>7</sup> *Supra*, note 5.

<sup>8</sup> *Bosch*, 769 F.3d at 1101.

<sup>9</sup> *Id.* at 1099.

<sup>10</sup> *Id.* at 1101.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.* at 1097.

<sup>13</sup> *Id.* at 1099.

<sup>14</sup> *Bosch*, 769 F.3d at 1099–1100.

<sup>15</sup> *Id.* at 1101.

<sup>16</sup> *Id.*

<sup>17</sup> *Id.* at 1102.

<sup>18</sup> *Williamson v. Citrix Online, LLC*, 770 F.3d 1371, 112 U.S.P.Q.2d 1793 (Fed. Cir. 2014) (89 PTCJ 8, 11/7/14).

<sup>19</sup> *Id.* at 1379.

<sup>20</sup> *Id.*

<sup>21</sup> *Id.* at 1380.

<sup>22</sup> *Id.* at 1378.

<sup>23</sup> *Id.* at 1379.

tisan would see as connoting structure.<sup>24</sup> Third, the court looked to the specification and, despite the description of the phrase being given “in a high degree of generality . . . using functional expressions,” found it “difficult to conclude” that the phrase was devoid of structure.<sup>25</sup>

The court finally concluded that the presumption against invoking means-for treatment in the absence of the word “means” was not overcome because the claim limitation at issue was not sufficiently “devoid of structure,” vacating the district court’s determination that the associated claims were invalid as indefinite.<sup>26</sup>

### Measures for Avoiding Unwanted Means-For Treatment Without Overly Narrowing Claim Scope

The decision and the court’s analysis in *Williamson* may have left the patentee in *Bosch* wondering how “module” connotes more structure than “device,” why the *Bosch* court did not consult a dictionary for structural connotations, or why a functional definition in the *Williamson* specification was sufficient while the functional definitions in its own specification were insufficient. The *Bosch* patentee may also wonder why, even with a strong presumption against means-for treatment, its specification was tasked with additional burdens “to avoid” means-for treatment, while the claim in *Williamson* was presumed to avoid means-for treatment unless the phrase at issue was determined to be sufficiently “devoid of structure.”

While the court’s inconsistent analyses are perplexing, practitioners can take measures when drafting patents to sidestep unwanted means-for treatment. A simple solution is to buttress claims with plenty of structural limitations. The narrowed claim scope, however, is likely not welcomed by clients and is often needless. Instead, practitioners should strive to lessen the risk of unintended means-for treatment without overly narrowing claim scope. Measures to consider include:

- Use nonce words wittingly and only when coupled with a term or phrase connoting structure to a skilled artisan. Courts and the U.S. Patent and Trademark Office list examples of nonce words as: means, mechanism, module, device, unit, component, element, member, apparatus, machine, and system.
- Provide definitions of nonce word modifiers in the specification that impart structure to those modifiers.

<sup>24</sup> *Williamson*, 770 F.3d at 1380.

<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

ers. In one case, the Federal Circuit found that the phrase “detent mechanism” did not invoke means-for treatment<sup>27</sup> based partly on dictionary definitions of “detent.”<sup>28</sup> While favorable in this case, the suggestion here is to avoid reliance on extrinsic evidence to support a claim. Instead, provide a definition in the specification to make it part of the intrinsic record.

- Include examples of claim elements in the detailed description and/or in the drawings. The examples should exhibit structure and should be capable of performing the function recited by the claim elements.
- Recite terms in claims with known meanings in the particular technology area and that connote structure to skilled artisans. Inventors should be able to help identify such terms.
- Use dependent claims to add structure to an otherwise functional claim element in the accompanying independent claim. If a court invokes means-for treatment to the functional claim element, the patentee might be able to rely on the dependent claim for a more desired outcome.
- Couple functional claim elements with structures and/or components that are invariably present in the claimed apparatus. For instance, perhaps a claimed tightening mechanism always includes a bolt in the particular technology area. Claiming the bolt in this instance may provide sufficient structure to avoid means-for treatment, and would only add limitations that already exist in accused devices.

### Concluding Remarks

The key may lie in minimizing reliance on a court. In other words, practitioners should assume that a court will not work very hard to assign structure to a claim term to solidify the presumption against means-for treatment. Some practitioners may be reluctant to employ one or more of the above measures—such as defining modifiers in the specification or providing specific examples of structure—for fear that a court will limit the claims per the definitions or per the exemplary structures. But perhaps it is prudent to exercise some control over how claim elements are to be construed rather than giving a court or, worse yet, a defendant that control—particularly in the face of a potential invalidity or non-infringement determination when claims receive unplanned means-for treatment.

<sup>27</sup> *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 39 U.S.P.Q.2d 1783 (Fed. Cir. 1996).

<sup>28</sup> *Id.* at 1583.