

**Keywords:** Claim construction; Means-plus-function; Section 112, paragraph 6; importation of limitations from specification

**General:** For structure that performs a claimed function in a means-plus-function claim limitation to be properly identified as “corresponding” structure, the specification or prosecution history must clearly link or associate that structure to the function recited in the claim. In addition, claim terms must be given their plain meaning in the absence of evidence that the inventor intended a novel meaning or limited the scope of a term to particular embodiments.

*Northrop Grumman Corp. v. Intel Corp.*  
66 U.S.P.Q.2d 1341 (Fed. Cir. 2003)  
Decided March 31, 2003

**I. Facts**

Plaintiff Northrop Grumman was interested in building a licensing program, so it began approaching companies in the networking field in an attempt to license U.S. Patent No. 4,453,229 (“the ‘229 patent”). A special master construed 3 claim limitations unfavorably to Northrop and the case was dismissed against defendants 3Com and Linksys under F.R.C.P. 54(b). Northrop appealed.

Of the limitations that Northrop appealed, two were means-plus-function limitations. Independent claims 1 and 13 both recited “means for defining a functional state of [a] bus interface unit” and “means for monitoring a plurality of logical signals...” The third limitation related to whether the claim term “bus interface unit” restricted the scope of the claims to computer systems operating in a “command/response” networking environment, which was described in the specification.

**II. Issues**

- A. Did the district court properly construe the “means for monitoring a plurality of logical signals...” limitation of the claims of the ‘229 patent?
- B. Did the district court properly construe the “means for defining a functional state of [a] bus interface unit” limitation of the claims of the ‘229 patent?
- C. Did the district court properly restrict the scope of the term “bus interface unit” to “command/response” networking environments?

**III. Discussion**

A. No. 35 U.S.C. § 112, paragraph 6, allows a patentee to claim a function to be performed instead of structure. Such a claim limitation is to be interpreted “to cover the corresponding structure, materials, or acts described in the specification and equivalents thereof.” In interpreting a means-plus-function limitation, a court must (i) identify the function or functions being performed, and (ii) identify the corresponding structure described in the specification.

In this case, the Federal Circuit held that the district court correctly identified two functions required by the “means for monitoring” claim limitation. Those functions were “monitoring” and “generating control signals.” In analyzing the description of these functions in the specification, however, the Federal Circuit concluded that the district court’s assignment of corresponding

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structure was erroneous. Stating that structure may be identified as “corresponding” structure “only if the specification or the prosecution history clearly links or associates that structure to the function recited in the claim,” the Federal Circuit concluded that the inclusion of signals that are monitored by the “means for monitoring” cannot properly constitute a part of the “means for monitoring.”

B. No. As with the previously discussed “means for monitoring a plurality of logical signals ...,” the Federal Circuit analyzed the text of the ‘229 patent and concluded that the district court had incorrectly identified structure corresponding to the “means for defining a functional state of [a] bus interface unit.” The Court concluded that a proper interpretation of the structure corresponding to the “means for defining” included only a bank of flip-flops and not the supporting circuitry included by the district court.

C. No. The district court focused on the fact that all of the embodiments described in the patent specification were related to a “command/response” networking environment. When construing the claims, the district court included this limitation in the term “bus interface unit.” The Federal Circuit reversed, noting that the district court failed to give the term “bus interface unit” its plain meaning. The Court stated that “in the absence of an express intent to impart a novel meaning to claim terms, an inventor’s claim terms take on their ordinary meaning.”

#### **IV. Conclusion**

The lesson of this case is not complicated: don’t include only means-plus-function claims in your patents! Look at how much money has been spent on this case only to have it remanded back to the district court for additional fact finding using the new and improved technological input provided by the Federal Circuit. The patentee lost the case in the district court and was forced to face the (normally) patent unfriendly Federal Circuit just to keep its claim alive. This is not the outcome we want for our clients.

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