



Archetype IPSM

Federal Circuit Friday

www.archetype-ip.com

October 2021

Traxcell v. Sprint (October 12) reviewed the basics of proving infringement of claims that include means-plus-function limitations. In addition, the manner in which Traxcell lost the case indirectly illustrates how combining in-depth knowledge of the law with diligence and creative lawyering can sometimes yield better results.

Background: Facts & The Issue

The patent-at-issue relates to improving wireless communications by monitoring network performance data and the location of wireless devices to identify errors and take corrective actions. Traxcell asserted a claim that includes the following limitation: “means for receiving said performance data and corresponding locations from said radio tower and correcting radio frequency signals of said radio tower.”

The parties stipulated that the limitation was means-plus-function, that the corresponding function is “receiving said performance data and corresponding locations from said radio tower and correcting radio frequency signals of said radio tower,” and that the corresponding structure was an algorithm in the specification that “Traxcell identified.”

Traxcell alleged that Sprint’s accused technology used an equivalent of the cited algorithm, and relied on one specific legal test to prove its case (*i.e.*, the “Way-Result” test). The district court granted summary judgment of non-infringement on the grounds of insufficient evidence – specifically that Traxcell could not demonstrate that Sprint’s technology performed the requisite function in substantially the same way as the cited algorithm. Traxcell appealed.

Background: Relevant Black Letter Law

1. Claim drafting & interpretation – means-plus-function limitations
 - a. Patentees may claim an aspect of an invention in purely functional terms (*i.e.*, as a generic “means for” performing a function) provided they describe in the specification structure corresponding to the recited function.¹
 - i. This represents a “deliberate quid pro quo: the patentee is allowed to claim a limitation in broad functional language, ‘provided that the specification indicates what structure constitutes the means for performing the claimed function.’”²
 - b. A limitation in means-plus-function form “shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.”³
 - c. *Computer-implemented functions*: Corresponding structure is not a general-purpose computer but rather is the “special purpose-computer” that results from programming a general-purpose computer to perform the algorithm disclosed in the specification for performing the claimed function.⁴
 - i. Narrow exception: Where the claimed function is performed by a general-purpose computer without special programming – *e.g.*, basic computer processing, receiving, and storing functions.⁵

¹ 35 U.S.C. §112(f) [formerly §112 ¶ 6].

² *Dealer Track, Inc. v. Huber*, 674 F.3d 1315, 1328-29 (Fed. Cir. 2012).

³ 35 U.S.C. §112(f).

⁴ *E.g.*, *WMS Gaming, Inc. v. International Game Technology*, 184 F.3d 1339, 1349 (Fed. Cir. 1999); *Aristocrat Technologies. Austl. PTY Ltd. v. International Game Technology*, 521 F.3d 1328, 1333 (Fed. Cir. 2008) (“Because general purpose computers can be programmed to perform very different tasks in very different ways, simply disclosing a computer as the structure designated to perform a particular function does not limit the scope of the claim to ‘the corresponding structure, material, or acts’ that perform the function, as required by section 112 paragraph 6.”).

⁵ *In re Katz Interactive Call Processing Patent Litigation*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (Absent a reason to construe the terms more narrowly, the claimed functions of “processing,” “receiving,” and “storing” in a means-plus-function limitation “can be achieved by any general

This memorandum is for educational and informational purposes only and is not, and should not be construed as, legal advice.

This memorandum may be considered attorney advertising under state law.

© 2017-21 Bradford Paul Schmidt. All rights reserved.

Archetype IPSM

Federal Circuit Friday

2. Literal Infringement – means-plus-function limitations

- a. Must prove that accused device performs a function *identical* to the claimed function.⁶
- b. Must prove that accused device performs that function using a structure that is *the same as, or equivalent to*, the corresponding structure.⁷
 - i. Equivalent structure: Two “tests” for equivalent structure arise in Federal Circuit cases –
 - 1) *Insubstantial differences*: This is the fundamental issue – “The proper test is whether the differences between the structure in the accused device and any disclosed in the specification are insubstantial.”⁸
 - 2) *Substantially same way + substantially same result*: This is a specific way of analyzing the fundamental issue – a structure is equivalent if it performs the claimed function in (i) substantially the same way as the corresponding structure to (ii) obtain substantially the same result as the corresponding structure.⁹ It is not clear that this test supplants the broader “insubstantial differences” rubric or otherwise has become the *only* way to show insubstantiality of difference¹⁰ – thus, there may be room for creative advocacy in an appropriate case.
 - ii. Equivalent structure must be structure that was available at the time the claim issued; if the structure asserted as equivalent was developed after that point in time, then the analysis shifts to infringement under the doctrine of equivalents.¹¹

What Traxcell Adds or Changes:

This case does not change the law, but it does provide an example of how to analyze and prove infringement of claims that include means-plus-function limitations. It also supports one of my primary practice principles – combining in-depth knowledge of the law with diligence and creative lawyering to open doors to better results.

purpose computer without special programming” and “[a]s such, it was not necessary to disclose more structure than the general purpose processor that performs those functions.”).

⁶ *E.g., Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267 (Fed. Cir. 1999) (“Literal infringement of a 112, 6 limitation requires that the relevant structure in the accused device perform the identical function recited in the claim”); *Mobilemedia v. Apple*, 780 F.3d 1159, 1170 (Fed. Cir. 2015) (same).

⁷ *E.g., Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267 (Fed. Cir. 1999) (“Literal infringement of a 112, 6 limitation requires that the relevant structure in the accused device . . . be identical or equivalent to the corresponding structure in the specification”); *Mobilemedia v. Apple*, 780 F.3d 1159, 1170 (Fed. Cir. 2015) (same).

⁸ *Chiuminatta Concrete Concepts v. Cardinal Industries*, 145 F.3d 1303, 1309 (Fed. Cir. 1998) (citing *Valmont Indus., Inc. v. Reinke Mfg. Co.*, 983 F.2d 1039, 1043 (Fed. Cir. 1993) (“In the context of section 112, however, an equivalent results from an insubstantial change which adds nothing of significance to the structure, material, or acts disclosed in the patent specification.”)).

⁹ *E.g., Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267 (Fed. Cir. 1999) (“the statutory equivalence analysis requires a determination of whether the ‘way’ the assertedly substitute structure performs the claimed function, and the ‘result’ of that performance, is substantially different from the ‘way’ the claimed function is performed by the ‘corresponding structure, acts, or materials described in the specification,’ or its ‘result.’”).

This analytic framework is similar to the “Function-Way-Result” test used for infringement under the doctrine of equivalents, but differs in the context of means-plus-function limitations in that it relates to determination of *literal* infringement – *i.e.*, where the function in the accused device must be *identical* to the claimed function *in all cases*, whether the same or an equivalent structure is at issue. Thus, for purposes of determining whether a structure is equivalent in the means-plus-function context, the analytic test is more accurately stated as the “Way-Result” test.

¹⁰ As an example, the *Traxcell* opinion cites *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1333 (Fed. Cir. 2006) for the proposition that the Way-Result test “may” – *i.e.*, permissively – be used: “Once the relevant structure in the accused device has been identified, a party *may* prove it is equivalent to the disclosed structure by showing that the two perform the identical function in substantially the same way, with substantially the same result.” (italics added).

The relevant statute, 35 U.S.C. §112(f), only uses the word “equivalents” and does not limit the analysis in any way – allowing for argument around otherwise seemingly definitive or contradictory language in opinions about the nature of the proper analysis.

¹¹ *Al-Site Corp. v. VSI Int'l*, 174 F.3d 1308, 1320 (Fed. Cir. 1999) (“One important difference between §112, ¶ 6 and the doctrine of equivalents involves the timing of the separate analyses for an ‘insubstantial change.’ As this court has recently clarified, a structural equivalent under §112 must have been available at the time of the issuance of the claim. An equivalent structure or act under §112 cannot embrace technology developed after the issuance of the patent because the literal meaning of a claim is fixed upon its issuance. An ‘after arising equivalent’ infringes, if at all, under the doctrine of equivalents.”) (citations omitted).

Note that relying on the doctrine of equivalents eliminates the need to prove identical function – infringement can exist where the function performed by the accused device is merely “equivalent” to the claimed function. *Al-Site*, 174 F.3d at 311320-21 (“Furthermore, under §112, ¶ 6, the accused device must perform the identical function as recited in the claim element while the doctrine of equivalents may be satisfied when the function performed by the accused device is only substantially the same.”).

Archetype IPSM

Federal Circuit Friday

Traxcell Lost for Lack of Sufficient Evidence.

The Federal Circuit agreed with the district court that Traxcell failed to “provide enough evidence for a reasonable jury to conclude that the accused structure performs the claimed function in ‘substantially the same way’ as the disclosed structure.” The basic points supporting the decision are as follows:

- “[T]he identified structure from the specification is a ‘very detailed’ algorithm,” which includes “numerous steps necessary for its function.”
- In its proof offered at trial, “Traxcell neglected to address a significant fraction of that structure.”
 - “Traxcell’s infringement expert instead discussed the accused technology at only a generalized level and didn’t at all discuss at least nine entire steps of the algorithm – focusing on function and results but eliding the way those results are achieved.”
- “Showing identical function is not enough for literal infringement of a means-plus-function claim – Traxcell must also provide evidence of identical or equivalent structure. Here it did not, and so summary judgment was proper.”

Could Traxcell Have Approached the Issue Differently?

There may be very good reasons that Traxcell focused on the Way-Result test, so this is not intended as criticism of the lawyers involved. However, based solely on what I see in the case report (which is admittedly far from a complete accounting), if Traxcell knew that it lacked evidence for the Way prong – and it presumably knew, since its expert didn’t even address the Way prong as to a significant portion of the corresponding structure – I do not understand why Traxcell did not at least *try* to argue the broader principle of “insubstantial difference.”

As an example, Traxcell could have borrowed the “known interchangeability” test from the doctrine of equivalents jurisprudence to argue that Sprint’s algorithm was an equivalent.¹² That might not have worked in practice, of course, for any number of reasons (e.g., maybe there’d have been a lack of evidence that interchangeability was “known”), but Traxcell also could have focused on “insubstantiality” in a more general sense. For example, Traxcell might have argued that the differences between the algorithm in the specification and Sprint’s algorithm were not significant in practice or to a person of ordinary skill, etc.

Using these alternative approaches, whether Sprint’s algorithm performs the claimed function in the same “way” as the patent’s algorithm would not necessarily be relevant, much less fatal, to the argument. And it might have gotten Traxcell to the jury.

¹² There is clear and recognized overlap in the legal reasoning applied to § 112(f) equivalents and equivalents under the doctrine of equivalents such that it makes good sense to borrow from one or the other to make your case. See, e.g., *Warner-Jenkinson v. Hilton Davis Chemical*, 520 US 17 (1997) (Explaining that §112, ¶6 [now §112(f)] is “an application of the doctrine of equivalents in a restrictive role, narrowing the application of broad literal claim elements.”).