

Keywords: Undue Experimentation, 35 U.S.C. § 112 paragraph 1, Enablement, Anticipation

General: No principle requires that a witness testify as to legal conclusion of undue experimentation, provided factual showing is sufficient to justify jury's conclusion on factual issue of whether, under all circumstances, more than routine experimentation is needed to make the invention work as claimed. Multiple prior art references offered to prove anticipation do not constitute multiple separate legal theories, each of which must to be proven to show anticipation. If any single reference shows anticipation, the legal theory of anticipation is met. Findings as to invalidity of claims apply only to asserted claims at an infringement trial.

Northpoint Technology Ltd. v. MDS America Inc.
75 U.S.P.Q.2d 1244 (Fed. Cir. 2005)
Decided June 28, 2005

I. Facts

This case generally concerns terrestrial and satellite signal transmission and reception on a common frequency. Northpoint is the assignee of U.S. Patent No. 5,761,605 ("the '605 patent"), and U.S. Patent No. 6,169,878 ("the '878 patent").

In the early 1980's, the Federal Communications Commission ("FCC") began allowing direct broadcast satellite service ("DBS") from satellites in geosynchronous orbit using the frequency range of 12.2 to 12.7 GHz. The satellites did not provide local television programming to most users because each satellite could transmit only a limited number of channels. The satellites, therefore, typically transmitted only those channels that contained programming of national interest. As a result, most DBS users could not receive local channels.

The Northpoint invention claims to solve this problem by terrestrially broadcasting local programming on the same frequencies that are used by the DBS system in a manner that permits both signals to be received at the user location at the same time without interfering with each other. The concept underlying the invention is that the DBS satellites are in geosynchronous orbit above the equator and therefore transmit in a northerly direction to the North American continent. Accordingly, a directional antenna employed at a user location in the United States must be pointed south towards the satellite in order to receive the satellite signal.

Northpoint's preferred embodiment of the invention transmits terrestrial signals from north of the user's location to a second directional antenna at the user's location that is pointed northward towards the terrestrial transmitter. According to Northpoint, the terrestrial signal will not interfere with the DBS signal or vice versa because the terrestrial signal will be transmitted in a specific azimuth spaced away from the DBS satellite-to-user azimuth. Northpoint claims that in such a case, the signal received by each antenna at the user location will be outside the "directional reception range" of the other antenna.

In 1999, Northpoint and two other companies applied to the FCC for permission to provide terrestrial Multichannel Video Distribution and Data Service ("MVDDS") in the DBS frequency range of 12.2 to 12.7 GHz. Congress authorized the FCC to select an independent engineering firm to determine whether terrestrial and satellite use of the same bandwidth was feasible without causing interference. It was concluded that "MVDDS sharing for the 12.2-12.7 GHz band currently reserved for DBS poses a significant threat to DBS operation in many realistic operational situations," however, a "wide variety of mitigation techniques...if properly applied under appropriate circumstances" could possibly reduce or eliminate interference, but that bandsharing appeared to be feasible "if and only if suitable mitigatory measures" were used.

In 2002, the FCC adopted rules to allow terrestrial MVDDS in the DBS frequency range of 12.2 to 12.7 Gigahertz. MDS America, Inc. ("MDSA") applied to the FCC for an experimental license to test and prove its MVDDS system. The FCC granted the license, and MDSA arranged for a third party to perform tests in Florida using equipment furnished by MDS International, S.A.R.L. ("MDSI"). Northpoint became aware of the test in Florida and warned MDSA that performing the test would infringe its patents. After the conclusion of the Florida tests, Northpoint brought this action, asserting that MDSA and MDSI had infringed Northpoint's patents.

Northpoint asserted the '605 and '878 patents against MDSA and MDSI in an action filed in the United States District Court for the Southern District of Florida. In a Joint Pretrial Stipulation, Northpoint limited the asserted claims to claim 8 of the '605 patent and claims 1 and 7 of the '878 patent. Following a trial, a jury determined that MDSA had infringed claim 8 of the '605 patent and claims 1 and 7 of the '878 patent. The jury determined, however, that those three claims were invalid as anticipated, obvious, not enabled, and indefinite.

The district court entered judgment on the verdict. Northpoint appealed from a denial of its motion for judgment as a matter of law ("JMOL") regarding validity and the denial of a new trial. MDSA cross-appealed from the judgment that it infringed claim 8 of the '605 patent and claims 1 and 7 of the '878 patent. MDSA and MDSI jointly cross-appealed, contending that the district court should have extended the judgment of invalidity to all the remaining claims of the two patents in suit.

II. Issues

- A. Did the district court err in denying Northpoint's motion for a new trial based on invalidity of the claims due to anticipation?
- B. Did the district court err in denying Northpoint's JMOL on the enablement issue?
- C. Once the invalidity of three of the claims was shown, were the defendants properly denied judgment as to the invalidity of all of the claims of the '605 and '878 patents?

III. Discussion

- A. No. The Federal Circuit went through a fact oriented analysis of both the claim scope and the prior art reference used at trial. The district court construed the term "directional reception range" to refer to "[a] three-dimensional space about the centerline of a receiving antenna within which a usable signal can be received, a usable signal being a signal from which the information carried by it can be extracted." There was no challenge of the district court's construction of the term directional reception range, and so the Federal Circuit adopted the claim construction. The Court pointed out that nowhere in the claim was the requirement that the satellite and terrestrial antennas point in different directions. Thus, the Court found it proper for the Hult reference, an antenna array, to anticipate the claims, stating "[t]he electronically created null in an adaptive array antenna acts exactly like a null in a dish-type antenna...for that reason...the unwanted signal in Hult is outside the directional reception range of the antenna as that term is used in the '605 and '878 patents."

Northpoint petitioned for a new trial based on a claim that the evidence was too weak to show invalidity. The right to a new trial is a procedural issue not unique to patent law, so the applicable law is the law of the regional circuit to which an appeal would lie in a non-patent case, here the Eleventh Circuit. The test applied in the Eleventh Circuit to an appeal from the denial of a new trial motion is whether the trial court abused its discretion in concluding that

the verdict was not against the clear weight of the evidence. The Federal Circuit held that it was not an abuse of discretion for the district court to conclude that the verdict was not against the clear weight of the evidence.

Northpoint also argued that if alternate theories of liability are asserted in one jury instruction, "a new trial is to be granted if any one of the alternatives is unsupported by substantial evidence." *Cronin v. Wash. Nat'l Ins. Co.*, 980 F.2d 663, 669 n. (11th Cir. 1993). Northpoint suggests that each of the five different prior art references used to argue anticipation represents a separate legal theory of anticipation, and that a failure of proof with regard to any one of the five requires the grant of a new trial. The Federal Circuit disagreed, stating "[i]n this case, the evidence with respect to at least one of the prior art references was sufficient to prove anticipation of the asserted claims." Accordingly, the Court upheld the district court's order denying Northpoint's motion for a new trial on the issue of invalidity.

- B. No. The Court embarked on another fact-based analysis, this time regarding the enablement of the claims. Key evidence included specific parameters that were submitted to the FCC disclosing how to implement the terrestrial antenna that were not disclosed in the patent, as well as the federally selected engineering test firm's inability to eliminate interference by the terrestrial signal based on Northpoint's data set without experimentation and additional techniques being applied. Instead of undertaking an analysis applying the legal test for undue experimentation, (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims, *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988), the Court was content to defer to the jury finding, stating that the jury "reached a reasonable conclusion." There was no direct testimony as to what constituted undue experimentation, however the Court was quick to point out "we know of no principle that requires that a witness testify as to that legal conclusion, as long as the factual showing is sufficient to justify the jury's conclusion on the highly factual issue of whether, under all the circumstances, more than routine experimentation was needed to make the invention work that undue experimentation existed." Since the jury's conclusion was reasonable in the Court's eyes, the invalidity of the patents due to lack of enablement was upheld.
- C. Yes. The parties agreed to limit the evidence of infringement and invalidity to only three claims, and the jury's verdict was limited to those claims. Statements of Northpoint's counsel such as "the outcome should be determined by the claims we presented" and "the outcome [as to] all claims would be dictated by the outcome on the three [claims] we presented" do not provide a basis for holding the unasserted claims of the '605 and '878 patents invalid. No evidence or testimony was offered as to any other claims and as such, they are not invalid based solely on arguments made with respect to the claims in issue. The district court properly limited the finding of invalidity to the three claims asserted at trial.

IV. Conclusion

There is no principle requiring that a witness testify as to legal conclusion of undue experimentation. A factual showing is sufficient to justify a jury's conclusion of whether, under all circumstances, more than routine experimentation is needed to make invention work as claimed. Multiple prior art references offered to prove anticipation do not constitute multiple separate legal theories, each needing to be proven to show anticipation. If any single reference shows anticipation, the legal theory of anticipation is met. Findings of invalidity as to asserted claims in an infringement suit do not extend to all claims in the patent.