

NOTE: Pursuant to Fed. Cir. R. 47.6, this disposition
is not citable as precedent. It is a public record.

United States Court of Appeals for the Federal Circuit

03-1494

PREMIER NETWORKS, INC.,

Plaintiff-Appellant,

v.

LUCENT TECHNOLOGIES, INC. and
AT&T CORP.,

Defendants- Appellees.

DECIDED: March 22, 2004

Before CLEVINGER, RADER, and BRYSON, Circuit Judges.

BRYSON, Circuit Judge.

Premier Networks, Inc., filed a patent infringement action in the United States District Court for the Northern District of Illinois, No. 99 C 3787, alleging that Lucent Technologies, Inc., and AT&T Corp. (collectively “Lucent”) infringed Premier’s U.S. Patent No. 4,303,805 (“the ’805 patent”). The court granted summary judgment of noninfringement in favor of Lucent, and Premier took this appeal. We affirm.

I

Individual telephone sets within a telephone system are connected to the telephone company’s central office by telephone lines. The distance between a particular telephone set and the central office affects the amount of signal loss over the telephone lines; in general, longer telephone lines result in

greater impedance to the electrical telephone signal. Thus, the farther a particular telephone set is from the central office, the greater the resulting signal loss. The '805 patent is directed to a telephone system that compensates for signal loss over telephone lines. In particular, the '805 patent uses solid-state components to amplify the signals transmitted from and received by a telephone, with the degree of amplification determined by the impedance of the telephone lines. Claim 1 is the only asserted claim. It provides:

An improved telephone subscriber station network,
said network comprising telephone lines for connecting the subscriber station to other
subscriber stations,

said telephone lines comprising at least two lines having a D.C. potential therebetween,

receiver means for receiving communication signals from said lines,
transmitter means for transmitting communication signals over said lines,
first solid state electronic means coupling said transmitter means and said receiver means
to said telephone lines while automatically compensating for losses on said
telephone lines,
second solid state electronic means coupling said receiver means to said telephone lines
through said first solid state electronic means,
said second solid state electronic means operating in conjunction with said first solid state
electronic means for adjusting the sidetone in said receiver means and for
adjusting the level of the communication signals received from the telephone lines
by the receiver means, and
said improved subscriber station network using noninductive components for the
compensation.

Of particular relevance to this appeal, claim 1 requires a single solid-state electronic means coupling both the receiver and the transmitter of the telephone to the telephone lines, and it requires that the first solid-state electronic means automatically compensate for signal strength losses on the telephone lines.

Lucent has sold several telephone models that Premier alleges infringed the '805 patent. In support of its claim of infringement, Premier offered the declarations of its experts, J. Alvin Connelly and David W. Hughes, who analyzed the Lucent telephones. After conducting tests, including simulations using the circuit modeling software SPICE, the Premier experts concluded that Lucent's telephones used a single solid-state electronic means to couple both the receiver and the transmitter to the telephone lines, and that the solid-state electronic means performed the requisite automatic

compensation. In one set of tests, Dr. Connelly measured the voltages at the telephone receivers for a variety of current levels, simulating the Lucent telephones' behavior for different telephone line impedances. According to Dr. Connelly, the Lucent model 100 telephone amplified the signals by seven percent, and the rest of the accused telephones amplified the signals by at least ten percent. In one case, Dr. Connelly reported that the Lucent telephone amplified the signal by 41 percent.

Lucent in turn offered the declaration of its expert, Laurence W. Nagel. Dr. Nagel performed simulations of the Lucent telephones in which a transistor in the path between the transmitter and the telephone lines ("transmit transistor") was, according to Lucent, effectively removed. From his tests, Dr. Nagel concluded that only about five percent of the signal received at the receivers of the Lucent telephones passed through the transmit transistor. That five percent, Dr. Nagel asserted, was attributable to what he termed "parasitic leakage" and did not reflect "coupling" of the transmitter means and the receiver means by the first solid state electronic means, as required by the patent. Lucent asserts that parasitic leakage occurs because of the inherent imperfections of solid-state devices. In other words, although a transistor may be configured to allow current to flow only in one direction, a small amount of current may "leak" through the transistor in the wrong direction.

Dr. Nagel analyzed detailed schematics of the Lucent telephones and used them to generate simplified versions of the schematics that he claimed were accurate representations of the Lucent telephones. The simplified schematics depicted the Lucent telephones as containing independent transmit and receive paths joined only by what Dr. Nagel characterized as a "sidetone resistor." A sidetone resistor is a resistor that allows a small amount of current to flow directly from the transmitter of the telephone to the receiver, so that a person speaking into the telephone transmitter will hear his own voice through the receiver and will not hear what seems to be a dead line.

According to Dr. Nagel, the Lucent telephones are configured so that current passes through the transmit transistors in the outgoing direction from the transmitter to the telephone lines. Current is not supposed to pass in the opposite direction, from the telephone lines through the transmit transistor and ultimately to the telephone receiver. Dr. Nagel explained, however, that a small amount of parasitic

leakage passes through in the wrong direction, flowing from the telephone lines, through the transmit transistors, through the sidetone resistor, and finally to the receiver. Premier disputes the characterization of the signal passing through the transmit transistors to the receivers of the Lucent telephones as parasitic leakage and asserts that Dr. Nagel's tests establish that both the transmitter and the receiver of the Lucent telephones are coupled to the telephone lines through the transmit transistors.

Dr. Nagel also analyzed a schematic diagram appearing in the Tabalba patent, a prior art reference that was cited against the '805 patent. During prosecution of the '805 patent, the inventor characterized the Tabalba patent as disclosing "independent connections for the transmitter and receiver, with independent transistors," but not teaching "a single solid state electronic means common to both the transmitter and the receiver . . ." as required by the invention of the '805 patent. Dr. Nagel simplified the Tabalba schematic and concluded that the Tabalba patent disclosed a circuit that was essentially the same as that of the Lucent telephones. According to Dr. Nagel, the Tabalba patent disclosed independent transmit and receive paths joined only by a sidetone resistor.

Premier filed a motion for summary judgment of infringement. Lucent in turn moved for summary judgment of noninfringement on the ground that the Lucent telephones did not satisfy the "coupling" limitations in the asserted claim. The district court granted Lucent's motion, listing several grounds for its noninfringement ruling. The court first construed the "first solid state electronic means" and the "second solid state electronic means" as means-plus-function limitations and then ruled that, in light of the description of the coupling function in the specification, "the transmitters and receivers of Lucent's telephones are not coupled to the telephone lines by the required linking element."

The district court next noted that both parties' experts agreed that automatic compensation required a signal improvement of ten percent or greater, and concluded that none of the tests of Lucent's telephones showed that any of those telephones exhibited any change in current or voltage greater than 10 percent. The district court observed that there was some evidence that Lucent's telephones performed compensation using automatic gain control, but ruled that automatic gain control was a "substantially different form of compensation than that taught in the '805 patent."

Finally, the district court ruled that the Lucent telephones did not exhibit the requisite “coupling.” Lucent argues that the district court concluded that the Lucent telephones did not meet the coupling limitation because no more than parasitic leakage passes through the transmitter transistors. It is not clear that the district court rested its decision on that ground. However, it is clear that the district court ruled that Lucent’s “schematics track the Tabalba schematics” and that “if [Premier] is sufficiently different from Tabalba then Lucent is sufficiently different from [Premier].” Thus, the district court concluded that the claim should be construed to avoid the prior art and, consequently, did not encompass the structure embodied in the Lucent telephones, which the court found “track[ed]” the prior art.

II

On appeal, we focus on whether the district court correctly ruled that Lucent’s telephones did not practice the “coupling” limitations of the ’805 patent because Lucent’s “schematics track the Tabalba schematics.”^[1] The parties agree that the receiver cannot be coupled to the telephone line through components that allow only an insignificant amount of current to flow from the telephone line to the receiver. The parties disagree, however, on the amount of current necessary for the signal to be considered significant. In response to the question, “what would you say an insubstantial change at the receiver would be? I think we said less than 10 percent, right,” Dr. Connelly testified “[t]en percent, and in the right direction.” Lucent argues that this testimony constitutes an admission that if ten percent or less of the signal reaching the telephone receiver passed through the transmit transistor, then the portion of the signal passing through the transmit transistor would be insignificant and would not indicate coupling. Premier argues that Dr. Connelly’s testimony was actually directed at the issue of automatic compensation, rather than coupling, and that Lucent is unfairly using that testimony to support its position on coupling.

The district court resolved the dispute over the amount of signal necessary to constitute coupling by comparing the Lucent schematics to the prior art that the applicants distinguished during the prosecution of the ’805 patent. The district court construed the claim, in light of the prosecution history, to exclude devices that used “independent connections for the transmitter and receiver, with independent

transistors.” Premier does not dispute that construction. The district court then determined whether the connections for the transmitter and receiver were independent in light of the structure disclosed in the Tabalba patent. In other words, the district court construed the claim to exclude transmit and receive paths similar to those described in Tabalba, since the applicants characterized those paths as independent. We discern no error in that approach.

The prosecution history of the '805 patent clearly shows that the applicants disclaimed coverage of telephones with independent transmit and receive paths. During prosecution of the '805 patent, the examiner rejected the claims as anticipated by Tabalba as well as by Sencer, another prior art patent. In response, the applicants replaced the claims with new claims that the applicants asserted “distinguishe[d] over the prior art among other ways by pointing out the feature of using one active element to serve both the transmitted and received signals.” The examiner continued to reject claim 13 as anticipated by Tabalba and Sencer on the ground that “[b]oth networks [Tabalba and Sencer] show the use of solid state electronic means for coupling both the transmitting and receiver means to the telephone lines while compensating for line loss.” The examiner also rejected application claim 16 (a predecessor to claim 1 of the '805 patent), which recited a “second solid state electronic means in series between said receiver means and said first solid state electronic means to couple said receiver means to said lines,” because “it [was] not clear how the receiver means can be coupled to the lines to receive communication signals when it is recited that the second electronic means is coupled to the first electronic means.”

In response, the applicants amended claim 13 to specify that “a first solid state means couple both said transmitter means and said receiver means to said telephone lines.” The applicants then argued that “[n]either of the cited art patents [Tabalba and Sencer] teach a single solid state electronic means common to both the transmitter and the receiver for controlling the transmitted and received signals” and that, unlike the applicants’ invention, “[b]oth the Tabal [sic] and Sencer patents show independent connections for the transmitter and receiver, with independent transistors.” The applicants also canceled claim 16 and added application claim 18 (later renumbered claim 1), which recited substantially the same language (“first solid state electronic means coupling said transmitter means and said receiver means to said telephone lines . . .”). The applicants explained that they made that change

to “clearly show that the receiver means is coupled to the lines through both transistors Q1 and Q2 (first and second electronic means).” Thus, the applicants made clear that the circuit of Tabalba did not include a solid state electronic means that coupled both the transmitter and receiver to the telephone lines. The district court was therefore correct to infer from the prosecution history that, if the circuits of the accused telephones were substantially the same as the Tabalba reference, the accused telephones would not perform the “coupling” limitation as the inventors defined that limitation during prosecution.

Lucent argued to the district court that its telephones have the same circuit configuration as the Tabalba patent. In support of its argument, Lucent submitted a declaration by Dr. Nagel. In his declaration, Dr. Nagel compared schematics of the accused telephones to a schematic of the Tabalba prior art. Dr. Nagel traced the signal paths through those circuits and concluded:

Although the transmit and receive signals in the [Lucent telephones] are coupled to the telephone lines by the separate paths . . . a negligible amount of received signal may leak through the transmitter amplifier stages . . . into the sidetone resistor . . . and into the receiver amplifier stages This parasitic leakage signal would be several orders of magnitude smaller than the signal coupled directly from the telephone lines to the receiver stages and would have no noticeable effect on the operation of the telephone. As explained above . . . , this parasitic leakage effect does not constitute coupling as that term is understood by one skilled in the art. In addition, Tabalba . . . has independent transmit and receive paths coupled by a sidetone resistor, and would suffer from the same effect.

In support of its motion for summary judgment, Lucent further provided the district court with simplified schematics of the Lucent telephones and the Tabalba patent that were identical in all material respects.

Premier responds by challenging the sufficiency of Lucent’s analysis of the Lucent telephones and the Tabalba patent. Premier first argues that Lucent provided analysis for only one of its telephone models. Dr. Nagel addressed that point in his declaration, however, when he stated that “[a]fter an examination of the receive and transmit paths in the other accused Lucent telephones, I conclude that these telephones have circuit arrangements similar to” the telephone specifically described in the declaration. Thus, Lucent provided the district court with evidence that all of the Lucent accused telephones were substantially the same for purposes of the coupling issue. Premier does not appear to

have presented any contrary evidence.

Premier further argues that Lucent's simplified schematics are in fact oversimplified. Premier does not explain why Dr. Nagel's analysis is incorrect, however, nor does Premier put forth an alternative analysis of the relevant circuits. Premier also asserts that the Tabalba patent does not refer to a sidetone resistor or to parasitic leakage. However, Lucent put forth evidence that, although the Tabalba patent does not refer to a sidetone resistor or to parasitic leakage by name, an analysis of the Tabalba schematic shows that both a sidetone resistor and parasitic leakage are present in the disclosed circuit. Again, Premier has not presented any facts or alternative analysis to rebut Lucent's evidence. In sum, Premier does not point to any place in the record where it challenged Dr. Nagel's analysis of the schematics, and Premier does not appear to have put forth any of its own analysis to counter that of Dr. Nagel.

In response to Lucent's assertion that Premier introduced no evidence regarding the comparison of the Tabalba patent and the Lucent telephones, Premier argues that "Premier relied below on the teachings of the Tabalba patent itself." Premier argues that the Tabalba patent explicitly teaches that it has separate transmit and receive paths and that the inventors of the '805 patent did not distinguish the Tabalba patent based on signal strength. Premier misses Lucent's point, however. It is common ground that in light of the position taken by the applicants in the course of prosecution, the transmit and receive paths disclosed in Tabalba must be regarded as independent. As we explained above, during prosecution the applicants disclaimed the circuit configuration in Tabalba, which provides independent transmit and receive paths. Lucent's position is that a circuit can still have separate transmit and receive paths even if some small amount of current flows in the wrong direction from the telephone lines, through the transmit transistors, through the sidetone resistor, to the receiver. Lucent provided the district court with unrebutted evidence that the Tabalba patent discloses that the structure of the Tabalba device permits such current flow and that Lucent's telephones behave in the same way.

Finally, Premier argues that empirical evidence regarding current flow creates a genuine factual dispute regarding the "coupling" limitation. In particular, Premier refers to Dr. Nagel's conclusion that

about five percent of the signal traveling from the telephone lines to the receiver passes through the transmit transistors. The parties disagree as to whether five percent constitutes an amount of signal too insignificant to indicate “coupling.” Lucent argues that any amount of current below ten percent is insignificant, while Premier argues that five percent is significant. However, the district court did not need to resolve that question in order to reach its conclusion. Instead, it relied on Lucent’s evidence that the prior art Tabalba patent discloses a circuit very similar to that in Lucent’s telephones, and that the Tabalba circuit would behave similarly, with roughly the same amount of current flowing through the transmit transistors as in the Lucent telephones. As explained above, Premier did not put forth evidence to raise a genuine factual dispute regarding Lucent’s comparison of the Tabalba patent to the Lucent telephones.

When the party moving for summary judgment does not bear the ultimate burden of proof on an issue, the moving party may satisfy its initial burden as movant by “‘showing’—that is, pointing out to the district court—that there is an absence of evidence to support the nonmoving party’s case.” Celotex Corp. v. Catrett, 477 U.S. 317, 325 (1986). In the context of patent litigation, since the ultimate burden of proving infringement rests with the patentee, “an accused infringer seeking summary judgment of noninfringement may meet its initial responsibility either by providing evidence that would preclude a finding of infringement, or by showing that the evidence on file fails to establish a material issue of fact essential to the patentee’s case.” Novartis Corp. v. Ben Venue Labs., Inc., 271 F.3d 1043, 1046 (Fed. Cir. 2001). Once the moving party points to an absence of evidence on an essential issue as to which the nonmovant bears the burden of proof, the burden shifts to the nonmovant to show the existence of a genuine issue of material fact, which exists only if the evidence is such that a reasonably jury could reach a verdict in its favor. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 250-51 (1986); Golan v. Pingel Enter., Inc., 310 F.3d 1360, 1367-68 (Fed. Cir. 2002). In attempting to meet its burden, the nonmovant “cannot rest on mere allegations, but must present actual evidence.” Crown Operations Int’l, Ltd. v. Solutia Inc., 289 F.3d 1367, 1375 (Fed. Cir. 2002). Thus the nonmovant must “go beyond the pleadings and by her own affidavits, or by the ‘depositions, answers to interrogatories, and admissions on file,’ designate ‘specific facts showing that there is a genuine issue for trial.’” Celotex, 477 U.S. at

324 (citation omitted); accord Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1320 (Fed. Cir. 2003).

Lucent presented evidence, by way of Dr. Nagel's declaration, that Premier failed to show that Lucent's telephones materially differed from Tabalba. Premier was then obligated to designate specific facts to show that there was a genuine factual dispute as to infringement, an issue on which Premier bore the burden of proof.

Since Premier did not present enough evidence to raise a genuine issue of material fact regarding the similarity of the Lucent telephones to the prior art, the district court was correct in concluding that "Lucent's schematics track the Tabalba schematics." The applicants clearly distinguished the Tabalba patent as not exhibiting a single solid-state means coupling the transmitter and the receiver to the telephone lines. Because the undisputed evidence showed that the structure of the Lucent telephones was substantially similar to that of the disclaimed Tabalba circuit, the court was justified in concluding that the Lucent telephones did not infringe. Inasmuch as Premier did not provide a specific rebuttal to Lucent's summary judgment showing on that issue, the district court properly concluded that Premier had not met its burden of pointing to evidence from which a reasonable jury could have concluded that Lucent's telephones were different from the Tabalba device with respect to the coupling limitation. Accordingly, we uphold the district court's summary judgment ruling.

[1] Because we uphold the grant of summary judgment in Lucent's favor on the ground that Lucent's telephones do not satisfy the "coupling" limitations, we do not decide whether the two "solid state electronic means" are means-plus-function limitations or whether Lucent's telephones perform automatic compensation.