United States Court of Appeals for the Federal Circuit

**NUANCE COMMUNICATIONS, INC.,
A DELAWARE CORPORATION,**
Plaintiff-Appellant

v.

**ABBYY USA SOFTWARE HOUSE, INC., A
CALIFORNIA CORPORATION, ABBYY SOFTWARE,
LTD., A CYPRUS CORPORATION, ABBYY
PRODUCTION LLC, A RUSSIA CORPORATION,
LEXMARK INTERNATIONAL, INC.,
A DELAWARE CORPORATION,**
Defendants-Cross-Appellants

2014-1629, 2014-1630

Appeals from the United States District Court for the Northern District of California in No. 3:08-cv-02912-JSW, Judge Jeffrey S. White.

Decided: February 22, 2016

DEANNE MAYNARD, Morrison & Foerster LLP, Washington, DC, argued for plaintiff-appellant. Also represented by MARC A. HEARRON; MICHAEL ALLEN JACOBS, BROOKS M. BEARD, San Francisco, CA.

ERIK R. PUKNYS, Finnegan, Henderson, Farabow, Garrett & Dunner LLP, Palo Alto, CA, argued for defendants-cross-appellants. Also represented by NICHOLAS D. PETRELLA, LILY LIM; DON O. BURLEY, DONALD ROBERT DUNNER, EDWARD ROBERT YOCHES, Washington, DC; Defendants-cross-appellants ABBYY USA Software House, Inc., ABBYY Software Ltd., ABBYY Production LLC also represented by PETER J. KIRK, ABBYY USA Software House, Inc., Milpitas, CA; MEGAN OLESEK, Duane Morris LLP, Palo Alto, CA.

Before PROST, *Chief Judge,* DYK and CHEN, *Circuit Judges.*

PROST, *Chief Judge.*

This case involves optical character recognition ("OCR") technology. Nuance Communications Inc. ("Nuance") sued ABBYY USA Software House, Inc., ABBYY Software, Ltd., ABBYY Production LLC, and Lexmark International, Inc. (collectively, "ABBYY") in the United Stated District Court for the Northern District of California. Although Nuance asserted eight patents in its complaint, before trial Nuance narrowed its case and ultimately only tried three patents: U.S. Patent Nos. 6,038,342 ("'342 patent"), 5,381,489 ("'489 patent"), and 6,742,161 ("'161 patent"). The jury returned a verdict of non-infringement and judgment was entered against Nuance. Nuance appeals the judgment, arguing that a new trial on the '342 patent is warranted because the district court improperly adopted a dictionary definition for disputed claim limitations in the '342 patent. Nuance also contends that it was denied due process when the district court entered final judgment against Nuance as to all of its patents, even those that Nuance chose not to assert at trial, and thus seeks remand for a second trial on the untried patents. For the reasons stated below, we affirm the district court's rulings.

BACKGROUND

OCR technology is used to discern characters in digital images of text, like a scanned document, and to translate the text into a format where it can be searched or edited. OCR systems analyze characters in the scanned image using various techniques, including template matching, feature analysis, and context analysis. Template matching involves comparing a character in the digital image with templates of known characters. If there is no matching template, then feature analysis is used, which examines the characteristics of unknown characters to determine what they are. Sometimes template matching and feature analysis result in more than one possible character—such as a lowercase or uppercase "S"—in which case context analysis is used. Context analysis looks to the character's special context and linguistic context to determine the correct character.

I. THE '342 PATENT AND ABBYY'S ACCUSED PRODUCT

The only dispute on the merits in this case concerns the '342 patent. The '342 patent is directed to OCR systems and methods. It describes two "recognition" processes—template matching and feature analysis. The novelty of the invention is that it uses the results of the feature analysis to build new templates that can later be used in the first step of template matching. '342 patent col. 16 ll. 35–38. By using templates generated through feature analysis, the invention allows for template matching to recognize many more characters than it otherwise would be able to. The asserted claims of the '342 patent recite that an unknown character is "identified" or "recognized" with or using a character-recognition process. For example, independent claim 4 recites:

> 4. In an optical recognition system having a feature analysis process for identifying an unknown character, said optical character recognition system for identifying characters in a medium, a

method for constructing a template library for use while processing said medium, said method comprising the steps of:

(a) *identifying said unknown character* with said feature analysis process;

(b) building a template for said unknown character subsequent to having identified said unknown character; and

(c) storing said template in said template library.

'342 patent col. 27 l. 62–col. 28 l. 6 (emphasis added).

ABBYY's accused product, FineReader, uses OCR technology. It begins by breaking down individual lines of text into fragments. Each fragment is then examined for division points, called "vertices" which are endpoints of "arcs." Each arc corresponds to a "grapheme" image, which is a particular shape but not necessarily a character. FineReader examines each fragment and considers all combinations of grapheme images that could be combined to make a word. "Classifiers" then produce a list of "guesses" based on the combinations of grapheme images and provide a confidence value for each guess indicating how likely it is that the guess is correct. FineReader then performs a type of context analysis where it converts the grapheme guesses into characters and generates a list of possible words with associated confidence intervals. FineReader performs several more tests, including analyses based on linguistic information, to rank the word guesses. FineReader repeats that process for each fragment and after processing all of the fragments on a given line of text, it selects the best word candidates for each fragment.

II. Procedural History

Nuance originally asserted over 140 claims from eight patents against ABBYY. Three of those patents involved

OCR technology: U.S. Patent No. 5,261,009 ("'009 patent"), the '342 patent, and the '489 patent (collectively, "the OCR-patents"). The other five patents did not relate to OCR technology: U.S. Patent Nos. 5,131,153 ("'053 patent"), 5,436,983 ("'983 patent"), 6,810,404 ("'404 patent"), 6,820,094 ("'094 patent"), and the '161 patent (collectively, "the non-OCR patents"). The district court held a first *Markman* hearing on the three OCR patents. After issuing the first claim construction order, the district court asked the parties to propose case management scheduling for the rest of the case. It referred the case management conference to a special master who recommended, as Nuance proposed, that the court proceed with claim construction on the non-OCR patents and that the parties proceed through discovery, mediation, and then trial on both sets of patents. It further adopted Nuance's proposal that Nuance would limit its total patents at trial to four, and the total claims to fifteen. The district court adopted the special master's recommendations.

Nuance selected the '342 patent, the '489 patent, the '009 patent, and the '161 patent for expert discovery and trial, thus selecting both OCR and non-OCR patents. Ultimately, Nuance narrowed its case even further and only went to trial on seven claims from three patents (the '342 patent, the '489 patent, and the '161 patent). The jury found non-infringement and the district court entered final judgment against Nuance on August 26, 2013. Eight months later, in a motion by ABBYY to compel costs, Nuance responded that the costs award should be stayed until its remaining patents had been tried. Nuance indicated that the completed trial was only the "initial" trial and it had reserved its right to try the other patents in a subsequent trial.

The district court rejected Nuance's arguments and granted the motion to compel costs. The court noted that it entered judgment "[a]fter a full and fair trial on the issues selected by Nuance for its case-in-chief" and that

the final judgment "did not exempt any of Nuance's causes of action or reserve judgment on any of Nuance's patents that it chose not to pursue at trial." J.A. 22. The court further stated that it "afforded Nuance the opportunity to pursue discovery and claim construction on all its patents" but that it "agreed with Nuance's proposal that it would conduct a single trial" on a "manageable set" of patents. J.A. 22. The court also noted that Nuance failed to make any timely objections to the special master's report which indicated that there would be a single trial on both the OCR and non-OCR patents. The court continued, "Although in the initial stages of this case, the Court kept the option open to Nuance to pursue discovery and claim construction on all of its originally asserted patents, there was never any mention that there would be serial trials." J.A. 23. Indeed, the court noted that "according to its own representations, Nuance selected its 'best' and 'strongest' patents for trial." *Id.*

Nuance now appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

DISCUSSION

We review a district court's claim construction under the standard set forth in *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 135 S.Ct. 831, 841 (2015). A district court's case management decisions are reviewed for abuse of discretion, including legal and constitutional error.

Nuance raises two issues on appeal. First, with respect to the '342 patent, Nuance contends that a new trial is warranted because the district court failed to resolve the parties' claim construction dispute before trial and because the district court adopted a dictionary definition contrary to the intrinsic evidence for disputed claim limitations. Second, Nuance argues that it was denied due process when the district court entered final judgment against Nuance as to all of its patents, including those that were not asserted at trial, and thus seeks

remand for a second trial on the untried patents. We address each of these issues in turn.

I. CLAIM CONSTRUCTION

The parties originally disputed the constructions for a number of terms in the '342 patent, including "identifying" and "recognizing." They agreed, however, that the two terms were synonymous and thus should have the same construction. ABBYY initially proposed that "identifying" had a special meaning and referred only to identification by template matching and feature analysis. Nuance disagreed, explaining that "identifying" is "a simple word that is used every day and there is no indication that the inventors intended to use this term differently from its commonly understood meaning." J.A. 519. Nuance further argued that there is "simply no restriction in the specification" warranting departure from the plain and ordinary meaning. J.A. 520. The district court agreed with Nuance and thus construed the term "identifying" to mean "identifying." J.A. 9.

The parties then took discovery and prepared for trial using the court's construction. It became apparent during summary judgment briefing, however, that the parties disagreed as to the plain and ordinary meaning of "identifying," or at least its application to the accused devices. Nuance's expert asserted that one of FineReader's classifiers, which produces a list of grapheme guesses, was identical to the claimed "feature analysis." ABBYY's expert disagreed, saying that the classifier does not "identify a character" but instead generates guesses of graphemes with associated confidence values. He further stated that FineReader does not identify a character until the very end of the process: it is only after context analysis and after the best word candidate is selected that FineReader identifies a particular character. Based on these competing understandings of what is meant to "identify" a character, Nuance asked the district court to

allow briefing on the meaning of "identify" so that the dispute could be resolved before trial. ABBYY opposed, saying the term had already been construed.

The district court, after noting that it had already conducted two claim construction hearings in this case, said that it was "too late to do a construction" and that it was "unnecessary." J.A. 1368. Instead, the court said it was going to rely on the "very experienced trial counsel here" and ordered the parties "to arrive at a mutually agreed upon—quote, unquote—'ordinary meaning' of the term 'identify.'" *Id.* The court said that if the parties could not agree, it would "either use a Black's Law Dictionary definition, or some other definition, or just tell the jury to use its ordinary meaning." J.A. 1368–69. The parties could not agree. ABBYY, citing a dictionary definition, proposed "to establish the identity of" as the construction for "identify." Nuance proposed "identifying (finally or tentatively)," or, alternatively proposed that court instruct the jury as follows: "'Identifying' has its plain and ordinary meaning. Many times an identified character is still ambiguous." J.A. 1436. In an order resolving pretrial submissions, the court, without further explanation, stated that it "adopts the plain and ordinary meaning of the terms 'identifying' and 'recognizing' as the same: 'to establish the identity of.'" J.A. 16. The court instructed the jury accordingly.

On appeal, Nuance maintains that the district court failed to resolve the parties' claim construction dispute before trial in violation of *O2 Micro International Ltd. v. Beyond Innovation Technology Co.*, 521 F.3d 1351 (Fed. Cir. 2008). We disagree. At the *Markman* hearing, the district court found in Nuance's favor by adopting the plain and ordinary meaning of the term "identifying." The fact that shortly before trial Nuance became dissatisfied with its own proposed construction and sought a new one does not give rise to an *O2 Micro* violation. *See Akamai Techs., Inc. v. Limelight Networks, Inc.*, 805 F.3d

1368, 1376 (Fed. Cir. 2015) (finding no *O2 Micro* error where "the parties *agreed* in the stipulation as to both the meaning and the scope of the term during claim construction" and concluding that the defendant could not "argue at the jury instruction stage . . . that the construction was somehow too broad").

As described above, Nuance initially proposed the use of plain and ordinary meaning for "identifying" because it contended that the intrinsic evidence provided "no indication that the inventors intended to use this term differently from its commonly understood meaning." J.A. 519. The district court considered the intrinsic evidence and agreed that the disputed terms should be given their plain and ordinary meaning. J.A. 9 (stating that "the term identifying appears through portions of the patents that do not allude to the specific processing and may be analyzed according to any one of a number of techniques" and thus construing the term "'identifying to mean: 'identifying'"). Essentially, after the district court adopted Nuance's proposal, Nuance reversed course and tried to get a new construction of disputed terms shortly before trial, which the district court properly denied given the parties' earlier agreement and the lack of any good cause for revisiting the claim construction. *See Akamai*, 805 F.3d at 1376; *O2 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.*, 467 F.3d 1355, 1366 (Fed. Cir. 2006).

Nuance further contends that the district court erred in adopting a dictionary definition for the disputed terms that it says conflicts with the intrinsic evidence. But Nuance has shown no harm justifying a new trial. Nuance points to various portions of the specification that indicate that "identifying" includes ambiguous identifications. In other words, Nuance argues that the term "identify" does not mean that the recognition process must identify one final character; instead, "identify" also encompasses narrowing the possible choices to a class of characters for further analysis. The district court's con-

struction is not in conflict with Nuance's proposal. One could "establish the identity of" a single character or a class of characters. The operative words in the claims, then, are not "identifying" or "recognizing," but instead are the object of those words—what is being identified or recognized. And that is exactly what the parties argued over at trial—Nuance contended that ABBYY's software satisfies the "identifying an unknown character" limitation when its recognition process picks out a class of characters, while ABBYY presented evidence to the contrary. The district court did nothing to limit Nuance's ability to present its evidence on this issue, and its instruction to the jury did not prevent the jury from fully considering each party's position. After weighing the evidence, the jury agreed with ABBYY. Thus, even if the district court did err in adopting a dictionary definition for the disputed terms, Nuance is not entitled to a new trial because it is clear that "correction of the errors in [the] jury instruction on claim construction would not have changed the result, given the evidence presented." *Teleflex Inc. v. Ficosa N. Am. Corp.,* 299 F.3d 1313, 1328 (Fed. Cir. 2002).[1]

II. DUE PROCESS

Nuance also argues that the district court violated its due process rights by entering judgment against it on all of its patents, even those that were not tried before the jury. ABBYY responds that there is no due process violation because Nuance voluntarily narrowed the case to its best patents and is now simply trying to get a second bite at the apple since it lost at trial. Although clearer guidance from the district court as to the consequences of Nuance's decision to narrow the case might have been

---

[1]   Because we affirm the district court's claim construction, we do not reach ABBYY's conditional cross-appeal.

preferable, ultimately the responsibility was on Nuance to timely notify the district court as to any objection to the court's procedures. Because it did not do so, and instead made the tactical litigation decision to move forward only on a subset of patents without contemporaneous objection, Nuance is not entitled to another trial on the remaining patents.

The course of dealings below indicates that, from the outset, Nuance only intended to have a single trial on a subset of patents that would be representative of all asserted patents. For example, Nuance consistently opposed multiple trials in its case management conference statements. *See* J.A. 5358 (opposing defendants' proposal to sever the action in two because it would "unnecessarily consume additional judicial resources, including multiple separate trials involving the same parties, the same products and the same witnesses"); J.A. 7095 (same); J.A. 7114 (same). Indeed, after the district court decided to hold two *Markman* hearings—one on the OCR patents and a second one on the non-OCR patents—Nuance reiterated its concern about multiple trials:

> My concern is that having multiple trials could be very expensive. I would think that we could have a *Markman* process, maybe have a subsequent *Markman* process and, perhaps, by then do summary judgments or whatever, we get to a manageable set for one trial.

J.A. 475–76. Moreover, in the back-and-forth with the district court regarding a case management plan, Nuance's counsel stated that, although it expected to proceed with *Markman* hearings on all of its patents, it only intended to have a single trial on a limited number of its "best" patents:

> But the reality of it is . . . if we have good time limits on us and we're going to focus on what's important at trial, the most I [have] ever gone to

> trial with are three patents. . . . So . . . although, we believe, we have good infringement claims on all this, you hope to focus so you don't have multiple trials. You hope to go ahead and have one trial on our best patents, go forward and that would hopefully take care of everything. We are not suggesting that we believe we're willing to withdraw these patents from the case, but because we're trying to focus this case down to something that's manageable for *Markman* and something that's manageable at trial, those are two different issues.

J.A. 419. Indeed, Nuance's counsel's main concern was not whether the trial would be limited to a subset of patents, but who would make that decision—Nuance or ABBYY:

> If we're forced to go forward on a sub-set of patents we don't view to be the strongest ones, our incentive is to continue to litigate after that. Like I said, I've been in a couple of these cases, the thought is in narrowing the case to be manageable for trial, you need to allow the plaintiff to effectively go on what they believe to be their strongest patents. If you do that and either win or lose that will typically resolve the whole dispute.

J.A. 421; *see also id.* at 420 ("We'd like to have our day in court on all . . . patents. That's not a reality. We're going to try to set up a plan, we're going to come up with representative claims.").

Consequently, Nuance elected on its own, without instruction from the court, to "move forward" on six patents with "no more than 24 representative claims." J.A. 402–04. Nuance also asked for flexibility in substituting different representative claims later in the case, and, indeed, Nuance did later substitute two of its previously selected patents for the '489 and '009 patents. In

fact, in response to the court's order to the parties to provide proposals on case management, Nuance further voluntarily narrowed its case to four patents and fifteen claims. Nuance stated in its proposed schedule that this "should further reduce the issues for the parties and the court following fact discovery if mediation is unsuccessful in resolving the case." J.A. 665. The special master, assigned by the district court to handle the remainder of the case management procedure, agreed with Nuance's proposal:

> [T]he Special Master recommends all parties proceed through discovery, mediation, and then trial on both the [OCR patents] and the [non-OCR patents]. Before beginning expert discovery, however, Plaintiff will limit the total patents to 4 and the total claims to 15 out of those 4 patents.

J.A. 691. The reference to "proceed[ing]" to trial covered all patents in the case, and clearly contemplated reducing the number to four patents at trial. There was no reference to a second trial. Indeed, nowhere in the special master's recommendations—which the district court adopted in full—was a suggestion that there would be more than one trial. To the contrary, the special master's recommendation resolved the dispute over multiple trials and concluded that a single trial on a subset of representative patents was warranted. Nuance did not object to the special master's recommendations—which, of course, is not surprising, given that Nuance itself proposed the single-trial procedure—nor did it clarify that it intended to seek a second trial on the unselected patents. And ultimately, Nuance did not utilize its full allotment—it went to trial on fewer than half of the fifteen claims that it could have and on only three patents instead of four.

Nuance argues that it never abandoned its unselected patents or stipulated that the judgment on the selected

patents would apply to all of its patents. For support, it points to a number of statements it made before the district court regarding its right and intention to try all of its patents. *See, e.g.*, J.A. 419–20 (Nuance's counsel stating that he was putting some patents "on the side burner for now" and that those patents would not be "in the first trial"); *id.* at 421 (Nuance's counsel warning the court that if ABBYY forced Nuance to move forward on only a subset of its patents, then that could result in "two trials"); *id.* at 666 (Nuance stating in a joint case-management report that, "[i]f the case is unable to be resolved before trial, it is only fair that Nuance—not any of the Defendants—be able to select the patents for the first (and hopefully only) trial in this case"). Nuance made those statements, however, well before the district court adopted the single-trial procedure proposed by Nuance and recommended by the special master. Indeed, those statements were made in the context of moving forward on all patents for *Markman*, not trial. And that is exactly what the district court did: it allowed Nuance to select terms from all of its patents for claim construction, from which Nuance—not ABBYY—then selected its "best" and "strongest" patents for a single trial.

Nuance further contends that it expressly reserved its rights as to all patents, including those that were not selected for trial. Nuance points to its submission to the district court regarding its selection of patents for trial, in which Nuance stated that it would "postpone resolution of its infringement case" as to the unselected patents and that it "reserves its rights to reassert them against ABBYY and/or Lexmark at a later time in this suit or a future suit(s)." J.A. 727. But such a boilerplate reservation of rights is insufficient to overcome the clear recommendation from the special master for one trial—to which Nuance did not object—and the significant record evidence indicating Nuance's intention to have a single trial on a subset of its best patents.

Finally, Nuance relies on *In re Katz Interactive Call Processing Patent Litigation*, 639 F.3d 1303 (Fed. Cir. 2011) to support its position. In that case, we approved a district court's order limiting the number of patent claims that the patentee could assert at trial where the patentee was given the opportunity assert additional claims beyond the limit by showing that they raised unique legal issues. *Id.* at 1311–12. Because the patentee did not make such a showing, we concluded that there was no due process violation when the district court entered final judgment as to all patents and claims, even those that were not selected for trial. *Id.* We recognized, however, that had the patentee shown the district court that the excluded claims presented unique legal issues, these claims' exclusion could violate due process. *Id.* at 1312–13.

Nuance contends that, here, all parties agree that the unselected patents raised unique infringement questions, and thus the district court erred in not allowing Nuance to try all of its patents. That is not enough. In order to merit a reversal, Nuance would need to show that it acted below to protect its due process rights. The record below shows that as the district court winnowed the case, Nuance made no motion, objection, or assertion otherwise that any limits on the number of claims or patents it could assert deprived it of any due process rights to adjudication on each unique legal issue its operative complaint presented. Instead, the record shows that Nuance actively participated in structuring the winnowing process and never objected until it had already lost at trial. There has therefore been no due process violation and the district court properly found that Nuance was not entitled to a second trial on the unselected patents.

CONCLUSION

For the foregoing reasons, we affirm the district court's rulings.

AFFIRMED