

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

**TOMITA TECHNOLOGIES USA, LLC,
TOMITA TECHNOLOGIES INTERNATIONAL, INC.,**
Plaintiffs-Appellants

v.

**NINTENDO CO., LTD.,
NINTENDO OF AMERICA INC.,**
Defendants-Appellees

2016-2015

Appeal from the United States District Court for the Southern District of New York in No. 1:11-cv-04256-JSR, Judge Jed S. Rakoff.

Decided: March 17, 2017

IAN DIBERNARDO, Stroock & Stroock & Lavan LLP, New York, NY, argued for plaintiffs-appellants. Also represented by JOSEPH DIAMANTE, KENNETH STEIN.

JAMES S. BLANK, Arnold & Porter Kaye Scholer LLP, New York, NY, argued for defendants-appellees. Also represented by SCOTT G. LINDVALL; PAUL ISAAC MARGULIES, Washington, DC.

Before PROST, *Chief Judge*, BRYSON and WALLACH, *Circuit Judges*.

WALLACH, *Circuit Judge*.

The parties' patent infringement dispute concerning the 3DS, a handheld gaming console sold by Appellees Nintendo Co., Ltd. and Nintendo of America Inc. (together, "Nintendo"), returns to this court. Appellants Tomita Technologies USA, LLC and Tomita Technologies International, Inc. (together, "Tomita") sued Nintendo in the U.S. District Court for the Southern District of New York ("District Court"), alleging that the 3DS infringes claim 1 of U.S. Patent No. 7,417,664 ("the '664 patent"). A jury found that the 3DS infringes claim 1 of the '664 patent. We reversed and remanded that finding because it rested upon an incorrect construction of "offset presetting means" in claim 1. *See Tomita Techs. USA, LLC v. Nintendo Co. (Tomita I)*, 594 F. App'x 657, 659–64 (Fed. Cir. 2014). The District Court held a bench trial on remand and concluded that the 3DS does not infringe "offset presetting means" in claim 1, as properly construed. *See Tomita Techs. USA, LLC v. Nintendo Co. (Tomita II)*, 182 F. Supp. 3d 107, 113–18 (S.D.N.Y. 2016).

Tomita appeals the District Court's noninfringement finding. We have subject matter jurisdiction pursuant to 28 U.S.C. § 1295(a)(1) (2012). We affirm.

BACKGROUND

The subject dispute involves technology that incorporates three-dimensional (i.e., 3D) images, which "typically [are] captured with two cameras providing slightly different images known as stereoscopic images. A viewer perceives a 3D effect when each eye separately views a stereoscopic image intended for that eye. The strength of the 3D effect varies with the viewing conditions." *Tomita*

I, 594 F. App'x at 659. Because the subject appeal has a long history involving technical facts, we recount only those details necessary to dispose of the issues before us.

I. The '664 Patent

Entitled “Stereoscopic Image Picking Up and Display System Based Upon Optical Axes Cross-Point Information,” the '664 patent generally discloses “a stereoscopic video image pick-up and display system which is capable of providing the stereoscopic video image having a natural stereopsis even if the video image producing playback conditions are different.” '664 patent col. 2 l. 65–col. 3 l. 2. Claim 1 recites

[a] stereoscopic video image pick-up and display system comprising:

a stereoscopic video image pick-up device including two video image pick-up means for outputting video information from said pick-up means;

a stereoscopic video image display device for displaying different video images for the eyes of a viewer; and

a medium for transmitting video image information from said stereoscopic video image pick-up device to said stereoscopic video image display device,

in which said stereoscopic video image pick-up device includes cross-point measuring means for measuring CP information on the cross-point (CP) of optical axes of said pick-up means and outputs information including the CP information and video image information to said medium; and

in which *said stereoscopic video image display device includes offset presetting means for offsetting and displaying said different video images* based upon said video image information, said cross-point information[,] and information on the size of the image which is displayed by said stereoscopic video image display device.

Id. col. 21 ll. 44–65 (emphases added). “Offset presetting means” in claim 1, a means-plus-function limitation,¹ means “timing control unit 32, signal switch 40, switch control unit 41, and synthesis frame memory 50 described in Figure 3 and column 9 line 44 to column 10 line 29 and equivalents thereof” in the ’664 patent. *Tomita I*, 594 F. App’x at 663 (footnote omitted).

A means-plus-function limitation must recite a function *and* a corresponding structure. *See, e.g., Iborneith*

¹ “A means-plus-function limitation contemplated by 35 U.S.C. § 112, ¶ 6 . . . recites a function to be performed rather than definite structure or materials for performing that function.” *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.*, 145 F.3d 1303, 1307 (Fed. Cir. 1998); *see* 35 U.S.C. § 112, ¶ 6 (2006) (explaining that “[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof”). Congress amended § 112 when it passed the Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 4(c), 125 Stat. 284, 296 (2011), but the amended statute does not apply here because the application leading to the ’664 patent was filed before the amended statute’s effective date, *id.* § 4(e), 125 Stat. at 297.

IP, LLC v. Mercedes-Benz USA, LLC, 732 F.3d 1376, 1379 (Fed. Cir. 2013). Only the disputed limitation’s structure is at issue. Here, the relevant corresponding structure of the limitation contains two parts: the timing control unit 32 “performs the ‘offsetting’ portion of the claim function,” whereas “[t]he ‘displaying’ portion of the claim function is performed by the switch control unit 41 presetting the timing of switching of the signal switch 40 for writing of video data into synthesis frame memory 50.” *Tomita I*, 594 F. App’x at 663 (internal quotation marks, brackets, and citation omitted).

II. The 3DS

Although primarily designed to play video games, the 3DS has a camera application and an augmented reality application. Similar to “offset presetting means” in claim 1 of the ’664 patent, the 3DS produces 3D images in these applications by capturing and offsetting different images on a grid with horizontal and vertical axes. *See* J.A. 5191, 5193–94. Tomita alleges that these applications, described in greater detail below, infringe the disputed limitation.

III. Procedural Posture

The District Court found that the 3DS neither literally infringes “offset presetting means” in claim 1 of the ’664 patent nor infringes that limitation under the doctrine of equivalents. *See Tomita II*, 182 F. Supp. 3d at 113–18. The District Court’s analysis consisted of two parts, one that examined the “offsetting” and “displaying” portions under the function-way-result test and another that examined those portions under the insubstantial differences test. *See id.* Under both tests, the District Court found that the 3DS and the disputed limitation do not possess equivalent structures. *See id.*

DISCUSSION

I. Standard of Review

“Following a bench trial, we review a district court’s conclusions of law de novo and its findings of fact for clear error.” *Allergan, Inc. v. Sandoz Inc.*, 796 F.3d 1293, 1303 (Fed. Cir. 2015) (citation omitted). “Infringement, both literal and under the doctrine of equivalents, is an issue of fact” *Roton Barrier, Inc. v. Stanley Works*, 79 F.3d 1112, 1125 (Fed. Cir. 1996) (citation omitted). “A factual finding” of noninfringement “is clearly erroneous if, despite some supporting evidence, we are left with a definite and firm conviction that a mistake has been made.” *Allergan*, 796 F.3d at 1303 (citations omitted).

II. The District Court Properly Concluded That the 3DS Does Not Infringe Claim 1 of the ’664 Patent

Tomita contests the District Court’s conclusion that the 3DS does not infringe literally or under the doctrine of equivalents the “offset presetting means” limitation in claim 1 of the ’664 patent. *See* Appellants’ Br. 44–64. Tomita alleges that the District Court committed legal and factual errors in its analysis of the “offsetting” and “displaying” portions of the corresponding structure in the disputed limitation.² *See id.* at 44–57 (discussing legal

² Tomita raises several arguments in the background section of its brief, *see, e.g.*, Appellants’ Br. 24 (contesting certain District Court findings), and in footnotes, *see, e.g., id.* at 51 n.22 (contesting other District Court findings). Tomita has waived those arguments, though we address some of them for completeness. *See In re Baxter Int’l, Inc.*, 678 F.3d 1357, 1362 (Fed. Cir. 2012) (holding that a party waives an argument that it raises in the background section of its brief, but not in the argument section); *SmithKline Beecham Corp. v. Apotex Corp.*,

errors), 58–64 (discussing factual errors). After setting forth the applicable legal framework, we address Tomita’s arguments on a portion-by-portion basis.

A. Legal Framework

“To prove infringement, a [party] must prove the [literal] presence of each and every claim element or its equivalent” in the accused product. *Star Sci., Inc. v. R.J. Reynolds Tobacco Co.*, 655 F.3d 1364, 1378 (Fed. Cir. 2011) (citation omitted). “Literal infringement of a means-plus-function limitation requires that the relevant structure in the accused device [(1)] perform the identical function recited in the claim *and* [(2)] be identical or equivalent to the corresponding structure in the specification.” *Gen. Protecht Grp., Inc. v. Int’l Trade Comm’n*, 619 F.3d 1303, 1312 (Fed. Cir. 2010) (emphasis added) (internal quotation marks and citation omitted). Because the disputed limitation and the 3DS share the same function, the instant appeal concerns only whether the disputed limitation and the 3DS contain equivalent structures. The Supreme Court has described the test for structural equivalence in the means-plus-function context as “an application of the doctrine of equivalents in a restrictive role.” *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 28 (1997). Thus, literal infringement and infringement under the doctrine of equivalents turn on a single question: whether structural equivalency exists between the disputed limitation and the accused product. *See id.*

We apply “two articulations of the test for equivalence,” the function-way-result test and the insubstantial difference test. *Voda v. Cordis Corp.*, 536 F.3d 1311, 1326

439 F.3d 1312, 1320 (Fed. Cir. 2006) (“[A]rguments raised in footnotes are not preserved.”).

(Fed. Cir. 2008). We describe these tests in greater detail below.

B. The '664 Patent and the 3DS Do Not Possess Equivalent “Offsetting” Structures

Tomita contests the District Court’s finding that “offset presetting means” in claim 1 of the '664 patent and the 3DS do not possess equivalent offsetting structures. Appellants’ Br. 44–52. In so doing, Tomita challenges the District Court’s findings under both the function-way-result test and the insubstantial differences test. *See id.* We address Tomita’s arguments on a test-by-test basis.

1. The Function-Way-Result Test

The function-way-result test provides that “an element in the accused device is equivalent to a claim limitation if it performs substantially the same function in substantially the same way to obtain substantially the same result.” *Voda*, 536 F.3d at 1326 (internal quotation marks and citation omitted). Because the parties do not dispute that the claim limitation and accused device share the same function, our analysis focuses on the “way” and “result” prongs of the test. In assessing each prong, we must determine whether the way the accused product performs the function or the result thereof is “substantially different” from the way or result of the subject patent. *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267 (Fed. Cir. 1999).

The District Court found “that Tomita fails both the way and result prongs of the test.” *Tomita II*, 182 F. Supp. 3d at 115. With respect to the way prong, the District Court identified the collective effect of three aspects of the 3DS that set its ways apart from the way described in the disputed limitation:

First, [the 3DS’s image] . . . transformations can [a]ffect multiple adjustments to an image simultaneously—for instance, vertical translations as

well as horizontal translations—while the '664 [patent's] relative timing offset is limited to [a]ffecting horizontal translations. Second, [the 3DS's ability to] implement[] adjustments in software rather than hardware provides more flexibility, because software can be updated and the [3DS's graphics processing unit] performs other functions related to gaming. Third, [the 3DS's ability to] render[] both images [used to create the 3D effect] allows for camera calibration to correct camera misalignment.

Id. (internal citations omitted). The District Court also found another “individual difference that is substantial on its own.” *Id.* According to the District Court, the disputed limitation offsets certain images only by adding a single value along the horizontal axis, whereas “the 3DS's [image] transformation[s] . . . also accomplish rotations and scalings,” thus demonstrating that the 3DS considers other factors that cause its “transformation[s] to] . . . operate” in ways “substantially different” from the disputed limitation. *Id.* (citation omitted).

Turning to the result prong, the District Court concluded that the disputed limitation and the 3DS yield substantially different results. The District Court found that “[t]he result of the structure in the '664 patent is pixel data stored in frame memory . . . [,] whereas the 3DS result is an image displayed on an LCD screen.” *Id.* The District Court also found that “the '664 patent creates and stores a single, stereoscopic image[] before displaying it,” whereas the 3DS does not. *Id.* at 116 (citation omitted).

Tomita does not challenge the District Court's factual findings; instead, it asserts various legal errors, none of which are persuasive. First, Tomita contends that the District Court improperly applied the function-way-result test because it is “[i]rrelevant.” Appellants' Br. 29; *see id.*

at 30. Although the Supreme Court has acknowledged that the test “often provides a poor framework for analyzing” non-mechanical products or processes, *Warner-Jenkinson*, 520 U.S. at 39–40, it has never disavowed the application of that test under particular circumstances and has left it to our court to decide the test’s application in future cases, *id.* at 40. Indeed, we have applied the test to patents covering products and processes similar to the ’664 patent. *See, e.g., Brilliant Instruments, Inc. v. GuideTech, LLC*, 707 F.3d 1342, 1346–49 (Fed. Cir. 2013) (analyzing a patent that discloses circuits that measure the timing errors of digital signals in high speed microprocessors).

Second, Tomita avers that the District Court “flipped [the] equivalence analysis on its head” in the function-way-result test by “evaluating equivalence in the context of the accused device,” “rather than evaluating equivalence in the context of the invention.” Appellants’ Br. 25 (citation omitted). However, evaluating whether the accused product possesses something of significance that is not found in the corresponding structure of the subject patent is precisely what the District Court was required to assess. *See, e.g., Gemstar-TV Guide Int’l, Inc. v. Int’l Trade Comm’n*, 383 F.3d 1352, 1363 (Fed. Cir. 2004) (holding that an accused product did not infringe because it “relied on a different technology that could produce results unattainable by” the corresponding structure in the subject patent).

Third, Tomita contends that the District Court found under the way prong “that software implementation essentially could never be equivalent to a hardware implementation” and that such a finding conflicts with our decision in *Overhead Door Corp. v. Chamberlain Group, Inc.*, 194 F.3d 1261 (Fed. Cir. 1999). Appellants’ Br. 32; *see id.* at 39–41. In support of its argument, Tomita quotes the following passage from *Overhead Door*: “it is a fundamental and well understood tenet of the

computing art that any software process can be transformed into an equivalent hardware process, and any hardware process can be transformed into an equivalent software process.” *Id.* at 20–21 (quoting 194 F.3d at 1269). Although we found in *Overhead Door* that the expert’s testimony precluded summary judgment of non-infringement, we did not hold that a software implementation of a particular function is invariably equivalent to a hardware implementation of the same function. *See* 194 F.3d at 1269–71. The District Court therefore did not err in declining to rely upon the quoted passage from *Overhead Door*.

2. The Insubstantial Differences Test

Under the insubstantial differences test, “an equivalent results from an insubstantial change which adds nothing of significance to the structure, material[,] or acts disclosed in the” relevant patent. *Valmont Indus., Inc. v. Reinke Mfg. Co.*, 983 F.2d 1039, 1043 (Fed. Cir. 1993). The District Court found substantial differences between the offsetting structure in the 3DS and in the “offset presetting means” limitation in claim 1 of the ’664 patent. The District Court found that “the hardware[-]based timing mechanism of the ’664 patent cannot provide the same functionality as the more flexible software-based transformation[s] . . . in the 3DS, which can [a]ffect” several different image transformations at the same time. *Tomita II*, 182 F. Supp. 3d at 117 (citations omitted). The District Court also found that the 3DS uses transformations to render new images, effectively changing the location of all the images’ pixels along both the horizontal and vertical axes of a grid, whereas the ’664 patent only offsets a single image along the horizontal axis. *See id.*

Tomita does not contest the District Court’s factual findings; instead, it avers that the District Court “erred as a matter of law in relying on the 3DS’s camera calibration feature” in its analysis, “which is unrelated to the func-

tion of the offset presetting means.” Appellants’ Br. 49. Tomita predicates its argument on the District Court’s statement that “[a] person of ordinary skill in the art would consider the[] differences to add something of significance to the ’664 patent’s offsetting structure, *including because they allow the 3DS to correct for camera calibration.*” *Tomita II*, 182 F. Supp. 3d at 117 (emphasis added) (citation omitted).

The District Court’s opinion belies Tomita’s argument. None of the District Court’s substantial differences findings rely upon camera calibration; instead, those findings rely upon differences in software and hardware, as well as image transformations. *See id.* Although the District Court found that these differences *result* in significant additions to the 3DS, like camera calibration, that does not mean that the District Court equated the results of the substantial differences with the differences themselves. Even if the District Court improperly considered camera calibration, it nonetheless found that the structure that performs offsetting in the 3DS is substantially different from the structure in the disputed limitation, *see id.*, and Tomita has not presented any evidence showing why these structures are not substantially different, *see generally* Appellants’ Br.

Tomita also avers that the District Court “erred as a matter of law in failing to evaluate equivalence for the 3DS’s mode of operation in which images are displayed from an SD card” because “a product that infringes a patent only part of the time, or in certain modes of operation, is still infringing.” *Id.* at 51 (citation omitted). According to Tomita, the District Court “evaluated equivalence only for the 3DS’s mode of operation in which it performs” multiple image transformations at the same time and corrects for camera calibration. *Id.* at 51–52. Even if Tomita is correct that the District Court evaluated equivalence only for one 3DS mode of operation, that does not change the fact that the District Court found several

other substantial differences between the '664 patent and the 3DS, *see Tomita II*, 182 F. Supp. 3d at 116–18, such that the District Court properly found no infringement.

3. Tomita's Remaining Arguments Fail

Tomita raises additional arguments that we find unpersuasive. Tomita alleges that the District Court “improperly merge[d]” the function-way-result and insubstantial differences tests. Appellants' Br. 45. Tomita bases its argument on the District Court's statement that “if two structures known to perform the same function *accomplish it significantly differently*, they are not interchangeable.” *Id.* at 46–47 (quoting *Tomita II*, 182 F. Supp. 3d at 117 (emphasis added)).

The District Court's opinion does not support Tomita's argument. The quoted passage appears in the portion of the District Court's opinion analyzing the results of the insubstantial differences test and, in particular, addressing the known interchangeability of certain techniques. *Tomita II*, 182 F. Supp. 3d at 117. The District Court neither stated that a “significantly differently” test controlled its inquiry, nor repeated “significantly differently” in its analysis. *See id.* at 113–18. “We will not find legal error based upon an isolated statement stripped from its context.” *VirnetX Inc. v. Apple Inc.*, 665 F. App'x 880, 886 (Fed. Cir. 2016).

To the extent that Tomita suggests that the District Court was *required* to examine evidence on known interchangeability, *see* Appellants' Br. 44–49, that position has no support in the law. The Supreme Court has stated that

the particular linguistic framework used is less important than whether the test is probative of the essential inquiry: Does the accused product or process contain elements identical or equivalent to each claimed element of the patented invention?

Different linguistic frameworks may be more suitable to different cases, depending on their particular facts. A focus on individual elements and a special vigilance against allowing the concept of equivalence to eliminate completely any such elements should reduce considerably the imprecision of whatever language is used. An analysis of the role played by each element in the context of the specific patent claim will thus inform the inquiry as to whether a substitute element matches the function, way, and result of the claimed element, or whether the substitute element plays a role substantially different from the claimed element.

Warner-Jenkinson, 520 U.S. at 40. The District Court conducted a comprehensive comparison of the “offsetting” structures in the 3DS and the ’664 patent and, thus, examined equivalency at a level that comports with what precedent demands. *See Tomita II*, 182 F. Supp. 3d at 117. Therefore, the District Court properly concluded that the 3DS does not infringe claim 1 of the ’664 patent.

C. The Court Need Not Address Whether the ’664 Patent and the 3DS Possess Equivalent “Displaying” Structures

Tomita challenges several aspects of the District Court’s finding that the 3DS and the disputed limitation of the ’664 patent do not possess equivalent displaying structures. *See Appellants’ Br.* 53–64. However, we need not address these arguments because Tomita has failed to demonstrate that the 3DS and the disputed limitation possess equivalent offsetting structures, and a party will prevail on infringement only if it establishes the literal “presence of *each and every claim element* or its equivalent” in the accused product. *Star Sci.*, 655 F.3d at 1378 (emphasis added) (citation omitted).

CONCLUSION

We have considered Tomita's remaining arguments and find them unpersuasive. Accordingly, the final judgment of the U.S. District Court for the Southern District of New York is

AFFIRMED