IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

THE NIELSEN CO. (US), LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No. 21-1592-CJB
	)	
TVISION INSIGHTS, INC.	)	
	)	
Defendant.	)	

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MEMORANDUM OPINION AND ORDER

August 10, 2022
Wilmington, Delaware

Christopher J. Burke
CHRISTOPHER J. BURKE, United States Magistrate Judge

As announced at the hearing on July 8, 2022, IT IS HEREBY ORDERED that Defendant TVision Insights, Inc.'s ("Defendant" or "TVision") motion to dismiss (the "motion"), (D.I. 11), which argues that Plaintiff's The Nielsen Co. (US), LLC's ("Plaintiff") asserted United States Patent No. 9,020,189 is directed to non-patent-eligible subject matter pursuant to 35 U.S.C. § 101 ("Section 101") is DENIED.

Defendant's motion was fully briefed as of March 1, 2022, (D.I. 18), and the Court received further submissions regarding Section 101-related questions on July 1, 2022, (D.I. 42; D.I. 43). The Court carefully reviewed all submissions in connection with Defendant's motion, heard oral argument, and applied the relevant legal standards for review of this type of Section 101-related motion at the pleading stage, which it has previously set out in *Genedics, LLC v. Meta Co.*, Civil Action No. 17-1062-CJB, 2018 WL 3991474, at *2-5 (D. Del. Aug. 21, 2018).

The Court's Order is consistent with the bench ruling announced at the hearing on July 8, 2022,[1] pertinent excerpts of which follow:

> I[will] now move on to the third case, *[T]he Nielsen Co[.] (US), LLC, v[.] TVision Insights, Inc.*, Civil Action Number 21-1592-CJB. In this consent case, we have Defendant's Rule 12(b)(6) motion. The motion as it relates to Section 101 is denied for the reasons I will set out now.
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> Plaintiff asserts in its complaint that Defendant infringes at least claim 9 of U.S. Patent Number 9,020,189 which I[will] refer to as the '189 patent. The patent is entitled "Methods and Apparatus to Monitor Environments." Generally, claim 9 recites an audience measurement device comprised of a first data analyzer, a second data analyzer, and a counter.[2] These limitations will be discussed in further detail in a moment.

[1] (*See* D.I. 45)

[2] ('189 patent, col. 23:23-37)

Plaintiff's complaint also alleged infringement of a second patent, and Defendant's motion was also directed to that patent, but Plaintiff subsequently filed a notice of partial dismissal of that infringement claim.[3] Defendant's motion is now moot regarding that patent,[4] so the Court's analysis here focuses only on the '189 patent.

First, on the issue of representative claims, Defendant says that claim 9 of the '189 patent is representative.[5] Plaintiff did[not] challenge that claim 9 is representative, and the Court will analyze only claim 9[;] because the Court will deny the motion with respect to claim 9, the Court will, therefore, deny it with respect to all other asserted claims or potentially asserted claims of the '189 patent.

I will now turn to the *Alice* analysis at step one. The first question is, what is the abstract idea that Defendant contends that this claim is directed to? In this regard, I will say that this case provides a great example of how a defendant who argues a Section 101 motion will get into trouble by being less than clear about what the purported abstract idea actually is.

In its opening brief, Defendant was a bit vague as to that question. More specifically, on page 13 of its opening brief, Defendant made reference to claim 9 and then stated, citing to the complaint, "As Nielsen admits, the patent relates to 'capturing images in the area in front of a television and analyzing those images to determine the number of people present.'"[6] The Court will refer to this as the "first version of the abstract idea." So at first, the Court thought, ["O]kay. That[is] the abstract idea that Defendant is saying the claim is directed to.["] But then in the next sentence of its brief, Defendant states that "[c]laim 9 is directed to [(1)] detecting an object within a threshold range using a 3-D method; [(2)], detecting a different object outside a threshold range with a 2-D method; and [(3)] counting the total number of people detected."[7] That is a much longer, more specific articulation of what the

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3 (D.I. 38)

4 (D.I. 39)

5 (D.I. 12 at 17)

6 (*Id.* at 13)

7 (*Id.*)

abstract idea at issue supposedly is. The Court will refer to this as the "second version of the abstract idea." Perhaps, thought the Court, this instead is what Defendant was pointing to as the abstract idea.

But the Court was still a little unclear, and so, apparently, was Plaintiff. In its answering brief, Plaintiff thought that the abstract idea was the first version of the abstract idea, and on page 15 and 16 of its brief, it addressed that version and explained why claim 9 was not directed [t]o it.[8] Then in Defendant's reply brief, things got even murkier. There, on page seven, Defendant stated that "TVision's motion in fact further specifies the abstract idea at issue to be detecting people using two different, specific methods and then counting them."[9] That is yet another, different articulation, and I will refer to that articulation herein as the "third version of the abstract idea."

Lastly, today, in slide two of its presentation, Defendant at first seemed to be going back to using the second version of the abstract idea, the one that uses words like "3-D method" and "2-D method."

This lack of clarity matters. As the Court has noted previously, in cases like *Yodlee, Inc., v. Plaid Tech[s.], Inc.*, a "movant's [in]ability to clearly and uniformly articulate the asserted abstract idea in question can make the *Alice* analysis difficult for the Court, and there are times when it can suggest weakness in the movant's overall position."[10] In the *Alice* analysis, after all, the Court needs to understand exactly what the asserted abstract idea is, and that[is] because at step one, the Court has to determine whether the claim is directed to that idea or something different and more specific. And it needs to understand what the purported abstract idea is at step two so that it can determine what more is in the claim[] beyond that idea and analyze whether that something more amounts to the inventive concept.

Today, the Court will largely focus on the third version of the abstract idea, that one that Defendant, in its final brief, assured

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[8] (D.I. 16 at 15-16)

[9] (D.I. 18 at 7)

[10] *Yodlee, Inc. v. Plaid Techs., Inc*., Civil Action No. 14-1445-LPS, 2016 WL 2982503, at *28 n.37 (D. Del. May 23, 2016).

the Court that it was putting forward, and the one that by the end of oral argument today Defendant's counsel posited as the most appropriate formulation.[11] Again, that is "detecting people using two different, specific methods and then counting them."

Is "detecting people using two different, specific methods and then counting them" an abstract idea? The Court will assume that it is for the purposes of its analysis here (though the reference to the use of two *different, specific methods* for detection sure does start to sound a lot like it could amount to a real-world application of an idea, not the idea itself). The Court will thus proceed to assess whether claim 9 is actually directed to this idea.

Plaintiff, for its part, argues that claim 9 is not. Instead, it argues that the claim provides a technological solution to the technological problems in the prior art.[12]

For the reasons discussed herein, the Court finds that Defendant's version of the abstract idea, its third version, oversimplifies what claim 9 is directed to. In cases like *CardioNet, LLC, v. InfoBionic, Inc.*, the [United States Court of Appeals for the] Federal Circuit has instructed [c]ourts to be "careful to avoid oversimplifying [the claims] by looking at [them] generally and failing to account for [] specific requirements[.]"[13] Yet that[is] what [D]efendant has done here, at least as to this version of the abstract idea. Why does the Court say this?

To answer that question, the Court turns to the patent specification, which sheds light on the "directed to" step one inquiry and bolsters the Court's conclusion. The Background section in column 1 explains that audience measurement systems collect people data that can be combined with media identifying data in order to generate data indicative of the amounts and/or types of people people that are exposed to specific pieces of media.[14] Or, to put it more colloquially, to help figure out how many people are watching a given [television] program at any given time.

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[11] (D.I. 45 at 96)

[12] (D.I. 16 at 15)

[13] *CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358, 1371 (Fed. Cir. 2020) (internal quotation marks and citation omitted).

[14] ('189 patent, col. 1:12-24)

And the Detailed Description section of the patent goes on to explain in columns 1 and 2 how prior art audience measurement systems maintained a tally for each frame of image data that reflects an amount of people in the environment at that time.[15] However, the specification explains, sometimes these systems can provide inaccurate tallies of people, such as, for example, [(1)] mistaking a nonhuman object for a human face; or, [(2)] by failing to detect human faces due to poor lighting conditions or partial visibility or other similar issues; or, [(3)] by failing to recognize human faces due to field-of-view limitations associated with image sensors.[16]

Plaintiff's complaint also attaches the declaration of Virginia Lee,[17] which I[will] hereafter refer to as the Lee [D]eclaration. I'll note for the record that while I[will] be focused on the specification [and] claim 9 in determining what the claim is directed to, I am simply referencing the Lee [D]eclaration because it underscores what is in the patent. Paragraph 19 of that declaration notes that the most common approach before the '189 patent came along employed the use of two-dimensional data analysis using . . . a camera . . . that captured a two-dimensional image.[18] But that led to some of the problems just described, such as that two-dimensional sensors would tend to overcount people because, for example, they misinterpreted images of pictures of people hanging on the wall and identified them as actual human beings who were present in the room. Or they failed to pick up real people in the room due to some of the lighting and visibility problems I just mentioned.

Columns 3 and 4 of the specification, as well as paragraph 20 of the Lee [D]eclaration, explain that other systems tr[ied] to address these problems by using three-dimensional data.[19] This improved recognition systems as compared to those that previously relied solely on two-dimensional data[,] in the sense that capturing and processing three-dimensional data improved the ability to distinguish actual human faces from face-like patterns in paintings

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15 (*Id.*, cols. 1:63-2:3, 2:27-30)

16 (*Id.*, col. 2:36-50)

17 (D.I. 1, ex. B)

18 (*Id.* at ¶ 19)

19 ('189 patent, cols. 3:10-4:25; D.I. 1, ex. B at ¶ 20)

or pictures. And it allowed for more accurate identification of body parts or skeletal frameworks of a real person. Yet these sources also explain[] that the use of three-dimensional data alone had its downsides too. In certain instances, for example, such as if the people are outside a threshold distance from the three-dimensional sensor, the sensor would have difficulty in identifying the people.[20]

Then, at column 4 of the specification, the patent tells us what is the claimed advance over the prior art. In lines 1 through 10, the patent states that: "[E]xamples disclosed herein recognize that in certain instances [(e.g.], when a subject object is greater than a threshold distance away from a sensor[])], a 2D-based recognition analysis may be better suited[(e.g.], may provide more accurate results[])] for object recognition than a 3D-based recognition analys[e]s. The advantages of 2D-based recognition analyses over the 3D-based recognition analyses are especially significant for [] relatively thin objects[(e.g.], arms, hands, et[c.)] at relatively far distances from the corresponding sensor."[21] And lines 26 to 30 at that column state that the invention disclosed in the patent "utilize[s] three-dimensional recognition analysis and two-dimensional analysis to more accurately and more efficiently recognize objects in an environment than previous recognition systems."[22] Paragraphs 21 and 22 of the Lee [D]eclaration also further emphasize that this innovation provided a "much more" accurate count of people present in the area of a television as compared to prior systems, which amounted to an improvement over prior art approaches.[23]

Again, the Federal Circuit has told us that at step one, it is permissible to look to the specification to determine what the claims are directed to, and if the specification describes something as the innovation over the prior art, then it stands to reason that the claim is probably directed to that element or concept.[24] Here, when you consider what columns 3 and 4 of the specification are telling us, it[is] clear that the innovation over the prior art is not

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20 ('189 patent, col. 3:32-49)

21 (*Id.*, col. 4:1-10)

22 (*Id.*, col. 4:26-30)

23 (D.I. 1, ex. B at ¶¶ 21-22)

24 *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016).

simply said to be "detecting people using two different, specific methods and then counting them." "Two different, specific methods" is vague. It could refer to *any* two such methods. Here, in contrast, the patent is focused on a method that utilizes a three-dimensional sensor to obtain data on a first object, but only if the object is within a threshold distance from the sensor[,] and using a two-dimensional sensor to obtain data on a second object[,] but only if the object is outside of that threshold distance from the sensor. In other words, the third version of the abstract idea simply does[not] capture the use of both a 2D and 3D sensor, nor does it capture the concept that those sensors should be working to capture data objects that are located at different distance[s] away from the respective sensors.

Of course, no matter what the specification tells us, []claim[s] claim, and a step one analysis must look to the claims in the "directed to" analysis. But unsurprisingly, claim 9 clearly recites an audience measurement device that incorporates these assertedly innovative elements.[25] The claim first uses a three-dimensional sensor at close range, which eliminates problems with the two-dimensional[-]only approach[,] such as overcounting by mistaking objects for people and accurately counting people in poor lighting conditions; second, it uses a two-dimensional sensor at long range, which eliminates the problem of inaccuracy of the three-dimensional[-]only approach in that range; and, third, it combines the results of the two approaches to arrive at an accurate people count. Thus, the invention in claim 9 utilizes two known approaches that had drawbacks when they were used individually, but combines them to get the best of both together. And as Defendant's opening brief recognizes, the other claims of the '189 patent similarly involve these same elements.[26]

So, again, characterizing claim 9 as being directed to "detecting people using two different, specific methods and then counting them" ignores the thrust of the invention. The claim clearly is[not] just about using "two different methods" to monitor people or an environment. It is about doing so in a *particular* way, using two-dimensional and three-dimensional sensors set up to capture data at two different distances.

As the Court said previously in opinions like *Sunoco Partners Marketing & Terminals L.P. [v.] Powder Spring Logistics, LLC*, it

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25 ('189 patent, col. 23:22-37)

26 (D.I. 12 at 13)

is Defendant's burden to articulate an abstract idea that correctly characterizes the claim at issue.[27] Defendant has failed to do so here as it relates to the third version of the abstract idea, and that alone is a sufficient basis to deny the Section 101 portion of its motion.

In an abundance of caution, let me also briefly address Defendant's second version of the abstract idea[:] that was "[(1)] detecting an object within a threshold range using a 3-D method; [(2)] detecting a different object outside a threshold range with a 2-D method; and [(3)] counting the total number of people detected." To be sure, unlike the third version of the abstract idea, this version includes all of the material claim limitations that the Court has been discussing. It would have to, because it[is] basically a restatement of claim 9, using almost every key word in the claim. But if Defendant is asserting that the claim is directed to this abstract idea, then its motion still fails at step one for a different reason: The second version of abstract idea is not actually an abstract idea at all. It[is] far too specific to be simply an idea "untethered from a real-world application," and instead it is an application of an idea that is meant to solve a technological problem, as described previously.

Although the Court could stop there, for the sake of completeness, it will make a few other points that also militate in favor of denial of Defendant's motion at step one.

Defendant argues that claim 9 is abstract because humans have long practiced the concept described in claim 9 of locating objects by using "two different methods[.]"[28] It gave as an example, as was noted in oral argument, a birdwatcher wanting to count birds who could first detect birds visible with bare sight, and then use binoculars to detect birds outside the threshold distance afforded by bare sight, and then combine the two inputs to generate a bird count.[29] But the Court is not persuaded that this analogy exactly captures the invention recited in claim 9. For one thing, claim 9 uses, among other things, a three-dimensional sensor[—]not a person's eyesight or pair of binoculars[—]to count objects. It is not clear to the Court that a human could do what a three-dimensional sensor could do. And regardless, as a practical matter,

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[27] *Sunoco Partners Mktg. & Terminals L.P. v. Powder Springs Logistics, LLC*, Civil Action No. 17-1390-LPS-CJB, 2019 WL 4466766, at *10 (D. Del. Sept. 18, 2019).

[28] (D.I. 12 at 15)

[29] (*Id.* at 14-15; D.I. 45 at 94-95)

human beings do not sit consistently for hours or days at a time around a television set in order to count how many people are watching. The entire reason a claim like claim 9 exists is because technology is being asked to fill a void that humans reasonably cannot.

Defendant also argues that the claim is directed to an abstract idea since it fails to describe *how* the claimed 2-D or 3-D methods work or *what* the thresholds distance should be or precisely *how* the counting functionality works.[30] And that[is] true. The claim[] do[es not] specify[this], but the claim *does* clearly utilize pieces of technology that are being used together in a sufficiently particularized way that provides a needed level of "how" to the invention. And the patent specification describes that very approach as providing a technological improvement over the prior art. Here again, if Defendant's main complaint is that the patent does[not] say enough about *how* to do the recognition analysis or the combining element, that sounds to the Court more like a Section 112 problem, not a Section 101 problem.[31]

The caselaw that the parties highlight as similar to claim 9 also helps to demonstrate this conclusion is correct and that [P]laintiff's conclusion here is the right one. For example, the Court strongly agrees with Plaintiff[32] that claim 9 is very similar to the claims that are at issue in *Thales Visionix Inc. v[.] United States*.[33] Claim 22 in *Thales* was exemplary, and it was brief. In two lines, it recited a method of determining an object's orientation based on the outputs of two inertial sensors that were mounted, respectively, on the object and a moving reference frame.[34] This was discussed today at oral argument.[35] The specification explained how conventional methods for tracking an object's motion were flawed and that the patent's invention provided multiple advantages, including

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30 (D.I. 12 at 13, 15)

31 *See Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1261 (Fed. Cir. 2017).

32 (D.I. 16 at 16; D.I. 43 at 1-2)

33 *Thales Visionix Inc. v. United States*, 850 F.3d 1343 (Fed. Cir. 2017).

34 *Id.* at 1345-46.

35 (D.I. 45 at 98)

increased accuracy, the ability to operate without requiring hardware, and simple installation.[36]

In finding at step one that the claim and another representative claim were not directed to the abstract idea of "using laws of nature governing motion to track two objects," the Federal Circuit noted that instead, the "claims specify a particular configuration of inertial sensors and a particular method of using the raw data from the sensors in order to more accurately calculate the position and orientation of an object on a moving platform."[37] Now, the Federal Circuit said th[is] even though, like here, claim 22 did[not] specify how you determine the orientation of the object or what processes or formulas you used to do that. The claim just said that you do so "based on" signals from the respective two sensors. Nor did the claim say how those sensors worked to provide signals. And the sensors used in *Thales*, like here, were conventional sensors.[38]

Nevertheless, it was enough for the Federal Circuit that the configuration of the sensors was a "particular" one or was used in a "particular method" for collecting data.[39] In other words, sufficient particularity was demonstrated by the fact that the sensors were specified to be placed [in] two different positions, an object and a moving reference frame, so long as the patent helped make clear how that "particular" arrangement solved the technological problem. And contrary to Defendant's argument, here it seems like we[have] about just that same level of particularity[—]two sensors, one is 3-D that[is] within a threshold distance of an object, one is a 2-D that[is] outside the threshold distance from the object, and a similar explanation in the patent about how this set-up could help solve some problems in audience measurement technology.

Although Defendant retorts that the '189 patent does[not] suggest that the sensor configuration is unconventional,[40] that[is] exactly

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36 *Thales*, 850 F.3d at 1345.

37 *Id.* at 1346, 1349.

38 *Id.* at 1344-45.

39 *Id.*at 1349.

40 (D.I. 18 at 9)

what column 4 does seem to be saying, as I[have] discussed previously. In its briefing, Defendant tries to further distinguish *Thales* by saying that its sensor configuration was "driven by navigational equations."[41] While it[is] true that the *Thales* Court said that the patent used "navigation equations" and "mathematical equations" derived from the arrangement of sensors,[42] it[is] not like the claims in *Thales* claimed any particular equations or any way of using the data from the sensors. Here, the Court cannot say that the math utilized by our sensors is any more or less claimed or any more or less complicated than what was used in *Thales*.

Defendant, for its part,[43] analogizes claim 9 of the '189 patent to claims at issue *in iLife Technologies, Inc., v[.] Nintendo of America, Inc.*[44] The representative claim at issue there was directed to a motion detection system that includes a sensor and processor and that evaluated relative movement of a body based on dynamic acceleration and static acceleration. The Federal Circuit found that these claims were directed to an abstract idea where the claims were not focused on a "specific means or method to improve motion sensor systems" nor a "specific physical configuration of sensors."[45] Nor did the patent specification include great detail about how the claim helped improve sensor systems.[46] Here, in contrast, claim 9 is directed to a specific device to improve audience measurement technology in a particular way, and the specification explains how this was so.

Lastly, Defendant also highlights *Yu v[.] Apple Inc.*,[47] a Federal Circuit case, as the most analogous case to claim 9 in its supplemental letter.[48] However, in that case, the type of camera configuration that the specification described as a technological

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41 (*Id.*)

42 *Thales*, 850 F.3d at 1348.

43 (D.I. 18 at 8)

44 *iLife Techs., Inc. v. Nintendo of Am., Inc.*, 839 F. App'x 534 (Fed. Cir. 2021).

45 *Id.* at 537.

46 *Id.* at 538.

47 *Yu v. Apple Inc.*, 1 F.4th 1040 (Fed. Cir. 2021).

48 (D.I. 42 at 1-2)

improvement was[not] claimed at all,[49] whereas here it is, albeit broadly. Indeed, Defendant's counsel admitted today that had *Yu* claimed that purportedly unconventional arrangement disclosed in the specification, the outcome in *Yu* likely would have been different.[50] Here, again, our specification says directly that the claimed combination was unconventional, so this case is not like *Yu*. In sum, while claim 9 may not be the most detailed claim, the Court easily finds that it is not directed to an abstract idea put forward by [D]efendant, and, therefore, Defendant's motion must be denied.

Defendant's motion also moves to dismiss Plaintiff's claim for willful infringement.[51] The Court will take that portion of the motion under advisement without argument. [The Court] will issue a forthcoming order on that portion of the motion.

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49 *Yu*, 1 F.4th at 1044-45.

50 (D.I. 45 at 117)

51 (D.I. 12 at 17-18)